# Introductory Lecture

TO THE

# COURSE OF PHYSIOLOGY

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GENTLEMEN,—When a professor opens his first systematic course of lectures it is customary for him, instead of plunging at once into the details of his subject, to occupy the attention of his audience with some remarks of a general character. In conformity with this custom, I have on this occasion to request your attention to some observations on the general scope of the science of physiology, its past history, its present aspects, the mode in which it is being advanced, and the manner in which I hope to teach it in this school. * * * * *

Physiology is based upon a tripod, consisting of Anatomy, Chemistry, and Physics. Hence we have physiological anatomy, physiological chemistry, and physiological physics.

The term "physiological anatomy" is conventional, and somewhat apt to mislead. Anatomy treats of the structure of living beings: all anatomy must therefore be physiological, inasmuch as it is the province of physiology to determine the functions or actions which the various parts of living beings perform. It has, however, been found convenient to discuss, in a course of human physiology, that part of anatomy which relates to the minute structure of the tissues and organs of the body. This subject has therefore been termed physiological anatomy, and is often also designated general, minute, or microscopic anatomy, or more frequently histology. Physiological chemistry treats of the chemical composition of living beings, together with the chemical changes which take place within them; while in the province of physiological physics are discussed those non-chemical laws regarding matter and energy which are common to animate and inanimate objects.

Ancient Greece was the cradle of physiology and of medicine. In that strange old time when Pythagoras, Hippocrates, Plato, Aristotle, and Epicurus lived and wrote, and when the morning of science was but beginning to dawn, it was fancied that all matter consists of four elements—fire, water, earth, and air. Thales imagined that in water the secret of life may be found. According to Anaximenes, it is in the air. In the opinion of Xenophan it is in the earth. While Pythagoras and many of his followers thought that it is to be found in *heat*.

Strange to say, this old Pythagorean notion, which originated twenty-four centuries ago, is now a popular tenet with some of the leading physiologists of the present day. Hippocrates, who lived four centuries before Christ, agreed with Pythagoras in ascribing an important place to the agency of heat, but he further supposed that there is a principle, termed by him Nature (φυσις), which presides over and directs all the actions of the body. He ascribed to this principle the power of selecting what is beneficial, and of rejecting what is detrimental to the body—a notion which still exists among the physiologists of our time.

Immediately after Hippocrates came Plato, the precursor of the spiritualists. He imagined the existence of the soul within man, and believed that it consists of three parts: the appetites, seated in the belly; the passions, residing in the breast; and the cognitive faculty, placed in the head. To the influence of these spirits he ascribed all the actions which take place in the body.

Aristotle held a somewhat similar doctrine. "Soul, generically considered, he defined to be the vivifying principle, or vital energy, common to all organic bodies, distinguishing this principle, as it exists in plants, in animals, and in man, into the vegetative, the sentient, and the rational soul. The organic functions of nutrition and generation, as they occur in plants and in animals, Aristotle attributed to the vegetative soul; the animal functions of sense, voluntary motion, appetite, and passion, he referred to the operation of the sentient soul; and the exercise of those powers of intellect by which man is distinguished from other animals he ascribed to the agency of the rational soul."* The vegetative soul Aristotle defined as the power by which all organised beings live. It is the same principle as that termed *Nature* by Hippocrates, as the *Archæus* of Paracelsus, the *vis essentialis* of Wolff, the *nisus formativus* of Blumenbach, and the *vital principle* of Barthez and other modern authors.

But the views of Aristotle, powerful though his great genius rendered them, did not go unchallenged. There arose a sect of materialists, headed by Epicurus, who refused to believe in spirits, and who maintained that the body is but an accidental assemblage of atoms, and that the various functions of its organs are simply due to different modes in which these atoms are grouped together.

Last of all these ancient physiologists came Galen. He lived seventeen centuries ago. Previous to his time physiology had made little progress, but his brilliant genius gave to it a new and powerful impetus. He eagerly studied anatomy, and was thereby led to inquire into the functions discharged by the various organs of the body. His knowledge of the minute structure of parts was so much more profound than that of his predecessors, and his notions regarding their functions so ingenious, that for centuries after his death his followers simply accepted and believed all that he had said, as though he had been an oracle.

But the morning of physiological science, which had dawned so auspiciously, became overcast. The struggling light grew dim by reason of the thickening darkness of barbarism which set in, and more than a thousand years came and went ere further progress was made in the investigation of living things.

The fifteenth century ushered in a new era. Learning revived, and with it physiology. For some time after this revival physics and chemistry were eagerly studied; and it not unnaturally followed, that while the mathematicians attempted to explain all the actions of the body by mechanical laws, the chemists were equally anxious to show that their science could satisfactorily account for these.

But notwithstanding the eagerness of the mathematicians and the zeal of the chemists, physiology made no important advance until two centuries and a half ago, when our immortal countryman Harvey discovered the circulation of the blood, and so ushered in the dawn of modern physiology.

Although the Novum Organum was published soon after the circulation of the blood was discovered, it was long ere the inductive method was adopted in the investigation of vital phenomena; and it must be confessed that it was in Germany, and not in England, that the writings of Bacon first influenced the physiologist. It was the great German physiologist, Haller, who, a century ago, first showed that physiology must be founded upon observation and experiment—who systematised and greatly added to the then existing knowledge, and thereby gave to our science its present shape. On this account Haller has been termed the "father of modern physiology;" but I think that this title may be claimed for Harvey, without doing injustice to Haller. Harvey made the greatest of all physiological discoveries ere the Baconian method was promulgated; while Haller, more than a century later, merely gathered together and arranged facts and made discoveries with Bacon's tools.

The activity which physiologists began to display after the impetus given by Haller led to the rapid growth and development of our science. I need not at present name to you the master-minds of this and other countries who in this and in the latter part of the past century have raised physiology to its present elevated stand-point. These will become household words to you as we discuss the various branches of our subject. Let me rather now indicate to you the present state of physiology, and how the science is being, and is still likely to be, advanced.

You are entering upon the study of physiology at a singularly active stage in its history. There never was a time when physiologists have been more thoroughly in earnest than they are now. The fashionable philosopher of a bygone age, who sat in his closet and dreamt, but who thought it beneath his dignity to conde-

* Thomson's Life of Cullen, vol. I., p. 167.

scend to experiment, and thereby allow fact to bridle his fancy, is happily now a *rara avis*. He now is reckoned the true philosopher who carefully observes the operations of nature, and questions her by means of experiment; who draws just inferences from his data; and who, though he may launch forth brilliant conceptions needing verification, nevertheless earnestly strives to find out things as they are, and not as, according to his feeble fancy, they ought to be.

The number of investigators in physiological science never was so great as it is at this moment; and yet, strange though it may appear, the progress made is not in such proportion to the number and talent of the workers as it has been during the last fifty years. The explanation of this is readily found in the fact that all the easy things have been done. Lines of research which some years ago readily led to the attainment of numerous and brilliant results have now landed us in regions where exploration is difficult, and therefore slow. For example, the great improvement which took place in the construction of microscopes some forty years ago was speedily followed by a multitude of discoveries regarding the minute structure of the tissues and organs of the body, and the functions which many of these discharge. But now nearly all the facts which can be easily ascertained by this instrument have been discovered; and although startling revelations still reward those who diligently explore the field of histology, it is nevertheless true that these are now few and far between. Among those who have used this instrument with great success, my predecessors in this chair, Mr. Bowman and Dr. Beale, stand pre-eminently forth. Mr. Bowman, by his researches on the structure of muscle, the structure of the eye, that of the kidney, and other parts, gained for himself a wide-spread fame as a histologist; while my immediate predecessor and present colleague, Dr. Beale, by his beautiful researches on the structure of the nervous system, by the introduction of high magnifying lenses, by the remarkable skill with which he has used these, and by the brilliant conceptions to which his microscopic researches have led him, has won the deepest respect and admiration from the whole scientific world, and has conferred an undying reputation upon the chair of physiology in this school.

Although the future progress of microscopic research doubtless depends not a little upon improvements which will be effected in the construction of the instrument, it has for some years been evident to all that histology now waits upon physiological chemistry. We want new modes of acting chemically upon the tissues ere we subject them to microscopic observation.

Still, however, there is yet a deal to be done in searching out the normal structure of the tissues and organs with the means at our command. Although the structure of the human brain has been explored to such an extent by that most skilled microscopist, Dr. Lockhart Clarke, and, as might be expected, nothing remains for any but accomplished histologists to undertake, still in the minute structure of the brains of the lower animals we have a most extensive subject, which many of you might now begin to investigate; and assuredly you could not work at anything more interesting and more important in the whole range of histology.

There is not much more to be expected from that kind of research which consists in stimulating, mutilating, or removing a part of the body, and watching the result. In the hands of Bell, Majendie, Reid, Brown-Séquard, Schiff, Bernard, Eckhard, Vulpian, and others, this method of procedure has led to the most important consequences; but, inasmuch as it is not a particularly difficult kind of research when applied to anything but the brain and delicate nerves, it has already been wellnigh exhausted. By this method we have attained most of our knowledge of the functions of the nervous system more especially. But although that knowledge is, on the whole, satisfactory in the case of most of the nerves and the spinal cord, it must be admitted that, with regard to the functions of the brain, the most important organ of all, the information hitherto acquired in this way is far from what it may yet be, if even no other method than this be resorted to. I shall describe to you at a future time the peculiar manner in which researches on this subject may yet be undertaken.

In speaking of the nervous system, I may mention that there is a fruitful mode of research open to you when you become physicians. It consists in the careful observation of the symptoms of nervous disease, combined with an accurate microscopic examination of the diseased parts after death. In this manner much will yet be learned of the function of the brain more especially.

Modern physiology has been enriched by a number of ingenious instruments for assisting us in the study of the motions which take place in the body. By means of the ophthalmometer, the movements of the crystalline lens have been accurately measured, and the changes it undergoes when we look at near or distant objects absolutely determined. Nerve force, which until lately was supposed to travel with such wonderful rapidity that "quick as thought" actually became a proverb, has, by means of Helmholtz's myograph, had the rate of its transmission along a nerve accurately estimated; and it turns out that, after all, this mode of energy moves with snail-like slowness when compared with the rate at which light and electricity travel. The movements which take place in the respiratory and circulatory systems are now being studied by means of numerous instruments of great ingenuity. We no longer trust our easily misled sense of touch when we want to accurately ascertain many obscure facts with regard to the pulse. In performing an experiment upon the circulatory system, we no longer estimate the force of the heart's action by merely feeling the pulse, or by observing the distance to which the blood is projected from a divided artery: we accurately measure the force and record the movements of the heart by means of suitable apparatus. These various instruments have been called "instruments of precision," inasmuch as they have rendered definite what could be only conjectural, or at best doubtfully ascertained, before their introduction. A great feature in many of them is the employment of a graphic method, by means of which the facts ascertained through their aid may be recorded. Thus we have the myograph, for recording the movements of muscles; the spirograph, for the respiratory movements; the cardiograph, kymograph, and sphygmograph, for registering movements which take place in the circulatory system. By means of these instruments, movements are recorded on revolving cylinders or on flat surfaces, so that a tracing, or writing, indicating the character and extent of the motion, may be preserved. A very important advance has taken place in physiology since this ingenious method was introduced. We owe it to our countryman, Thomas Young, who invented it while prosecuting some researches in physics; but to Vierordt and Helmholtz in Germany, and Marey in France, must be awarded the credit of having introduced it into physiological research.

The instruments to which I have alluded, together with many others employed in aiding physiological experiment, I hope to be able to show you in operation during the present session.

Undoubtedly the great achievements which are yet to be made in physiology will be accomplished by the chemist and by the physicist. Much, indeed, has already been done in physiological chemistry and physics; yet it is but a tithe of what undoubtedly remains. Physiological chemistry is yet in its infancy; at this moment it resembles the bottomless abyss at the foot of a cataract. A torrent of facts and speculations is continually pouring into a seething, surging gulf, in which there is scarcely anything but unrest. We have to deal with little else than a mass of facts as yet without arrangement. Do not, however, be discouraged by the unsatisfactory picture which I am obliged to place before you; rather let it stimulate you to enter the ranks of those who strive to find out the hidden things which have as yet baffled the investigator. In this great department there is assuredly work enough for centuries yet to come.

The physicists and the chemists are now more energetic than ever they have been in endeavouring to ascribe vital phenomena to physical and chemical force acting in certain peculiar arrangements of matter. Mayer's great conception, that energy, like matter, can neither be created nor destroyed by man, and that one form of energy is convertible into another, furnished a point of departure, which has led to a new epoch in natural science. This theory, curiously enough, brings us for the explanation of life back to the idea, put forth by Pythagoras, that heat is the parent of vitality. It was a happy guess on the part of the ancient philosopher; while with Mayer, the theory which leads to this conclusion resulted from the consideration of facts well ascertained in modern physics.

At a future time it shall be my duty to fully explain to you this principle of the conservation of energy put forth by Mayer, and elaborated by Helmholtz, Joule, Grove, Carpenter, and others; but I may at present briefly say, that on this theory we are led to look at the organic world in this way: we are invited to believe that just as the matter of which living beings consist is simply a peculiar arrangement and combination of that matter of which the inorganic world is composed, so the forces which organic matter exhibits are simply modifications of those forms of energy which we find in the inorganic world: they are but transformations of physical energy effected by peculiar arrangements and combinations of matter.

Should this theory be established, the notion of a vegetative soul or vital principle governing all the nutritive changes in organic bodies will be upset. Indeed, many leading physiologists have already abandoned their belief in the vital principle, and have adopted the explanations of the physico-chemical school. These have been accused of being materialists, and no doubt the epithet in its most severe sense is applicable to some of them; but, undoubtedly, not a little misconception exists among some of their critics. In the seventeenth century it was Stahl's great error that, while professing to counteract the physico-chemical tendencies of his time, he, in advocating the existence of what we now call a vital principle, identified that spirit with man's reasoning faculty. He failed to see what Aristotle had clearly perceived centuries before him—that a distinction must be made between man's rational soul and his vegetative soul or principle of vitality. Unhappily, there have been many writers since Stahl's time who have fallen into the same error. But it seems to me a great mistake to suppose that if we refuse to believe that a vegetative soul exists in a cabbage or a snail we must necessarily no longer believe in the existence within man of that rational soul which gives him his true nobility. It appears to me that we may refer the vital phenomena of a cabbage to the agency of physico-chemical force, and yet none the less firmly believe in man's spiritual being. *But in all this we must beware lest our fancy carry us beyond the legitimate interpretation of our facts.* It of course becomes us as physiologists to view steadily and inquiringly the aspect presented by living nature, when viewed by the light which physics and chemistry already afford. By working with the aid of that light, we have some chance of rending the thick veil which yet shrouds the nature of life in mystery. For, to the cardinal question of physiology, What is life? we must as yet return the answer—We do not know. If we fold our hands and refuse to believe in anything but a hypothetical vital principle, we shall never know; but when we have learned how to rightly comprehend the various forms of energy and the transformations which matter may undergo, we may be able to say that we have found out the secret of vitality.

In thus rapidly and imperfectly sketching to you the past history and present aspect of physiology, I think I must have given you some idea, however faint, of the rich harvest which yet awaits the physiological labourer. Certainly, a well-arranged and most comprehensive science has already been reared; but it is destined to attain proportions much more gigantic than it now presents. When we look around and ask where physiology is advancing with greatest rapidity, we are compelled to turn away from the country of Harvey, and look towards the land of Haller. Long ago the Germans perceived the vast importance of every physiological school being provided with a laboratory, furnished with all the physical and chemical appliances necessary for the prosecution of our science. They have approached physiology from the side of chemistry and physics. Public money has been freely given to assist them in scientific inquiry, and the result is that at every German school of medicine there is a practical school of physiology, where an amount of work is done which, in the aggregate, is so vast that it surpasses the physiological work of all other countries put together. In this much wealthier country we are not so fortunate. Public money but seldom finds its way to the assistance of inquiries, even though these have the well-being of the human race, and the aggrandisement of no one, for their ultimate object. The Council of this College is sufficiently alive to the importance of attaching a physiological laboratory to this Chair, thereby introducing the study of practical physiology into this school. Unfortunately it has hitherto been found impossible to procure sufficient accommodation for the purpose; but happily there is every reason to believe that, in connexion with a contemplated extension of the College, a laboratory, fitted to meet the requirements of modern physiology, will ere long be obtained. Meanwhile, however, it shall be my constant endeavour to render this course as practical as possible; for physiology is an experimental science, and just in proportion as the student is trained in the performance of physiological experiment, so will physiology, and with it medicine, advance. By-and-by I hope to establish a class for the study of practical physiology, such as that which has been attended with results so beneficial in a northern university.

After the eloquent manner in which my colleague, Professor Johnson, pointed out to you, on Friday last, the fundamental position which physiology occupies among the medical sciences, and the absolute necessity there is for anyone who proposes to practise medicine to make a diligent study of physiological science, it is unnecessary for me to add anything. I have only now to invite you to enter earnestly into the study of what you will certainly find is very fascinating. It may be difficult, but assuredly it will not be dull. I doubt not that you will be interested, and that your enthusiasm will be kindled by the strange things which physiology has already revealed, and by the suggestive pictures which she has to present to your fancy. I cannot believe that you will be able to resist the promptings she will give you to inquire into her mysteries. Although she will show you inexorable laws which you cannot disobey and escape the necessary consequence, yet she points out how the snares and pitfalls into which the ignorant and perverse slip may be avoided, while she widens our infinitely too narrow conceptions of that great First Cause who created matter and energy and fixed their laws.

## SOME PROPOSITIONS ON HOSPITALISM.

(IN ANSWER TO T. HOLMES, ESQ.)

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(*Continued from page 478.*)

To the statement that the death-rate after limb amputations is three times more excessive in the wards of our large and metropolitan hospitals than in single rooms in private country practice, one or two additional points of opposition have been raised—chiefly, however, by others, more than by Mr. Holmes. It has been especially suggested and averred that the class of cases operated upon by the hospital surgeon must be more perilous than the class of cases operated upon by the country surgeon; that the state of the patients at the time of operating must be more desperate and unfavourable in infirmary urban than in private rural practice; that the nature of the causes leading to the amputations must be more serious in the former than in the latter class of patients; and that altogether the operations must be radically of a more dangerous and fatal kind in large hospital practice than in private country practice. For none of these arguments against the comparison of hospital and country amputations is there, I believe, any just foundation. Of the two classes of limb amputations—those (1) for diseases and (2) for injuries—there is not a particle of evidence, as far as I am aware, to show that in severity and danger the pathological amputations in the country differ in any respect, in causation or otherwise, from the pathological amputations in the hospitals. On the large scale, any 100 of the one are on a par with any 100 of the other. But the question is different with amputations for injury; for in this traumatic class all the chief points are much more easy of comparison, and all the relative questions of hospital and country practice much more readily studied

and solved. For instance, we may, in reference to them, lay down the following observation as

PROPOSITION XII.—*The country amputations, though far more successful, ought to be more perilous and fatal than the hospital amputations, inasmuch as they contain a marked excess of amputations for injury; which traumatic amputations are more dangerous than amputations for disease.*

It is a well-known circumstance in surgical statistics that amputations for injury are, on the large scale, much more fatal than amputations for disease. The writings of Phillips, Lawrie, Malgaigne, Steele, Hayward, Norris, Gross, and various other writers, all contain abundant proofs of this fact. In the 2089 cases which I have published in the *Edinburgh Journal* of June, collected from large and metropolitan British hospitals, 1022 were amputations for injury, and 1067 for disease. Of the former 48 per cent. died; of the latter only 34 per cent.: or 14 in the 100 more died after traumatic than after pathological amputations. In the Glasgow Hospital returns, published by Dr. Lawrie, the proportion of deaths after amputations for injury was more than twice as great as it was after dismemberment for disease.

It was at first repeatedly suggested to me that country amputations would be found to be chiefly operations for disease, and that this would go far to account for their greater success over hospital amputations. "We all know," writes a London hospital surgeon in the *Medical Gazette* of Jan. 23, "how *very* different are the results of amputations for injuries and of amputations for disease. Is Sir Jas. Simpson prepared to show that these two classes of cases were in equal proportions in the two classes of cases which he compares?"—namely, those belonging to large hospital practice and those pertaining to private country practice. I am prepared to show that the advantages in this respect are all in favour of the hospital returns, and the very reverse of what this writer evidently supposes.

Of the 2089 hospital amputations, 1022, as just stated, were operations for injury. Of the 2098 country amputations collected and recorded in the *Edinburgh Journal of Medicine* for March to June, 1382 were operations for injury, and 716 for disease; or, to state it in a more tabular form,

| | | | |
|---|---|---|---|
| In 2098 country amputations ... | 1382 | were primary. | |
| In 2089 hospital " ... | 1022 | " | " |
| Giving thus a *surplus* of ... ... | 360 | primary amputations to the country returns. | |

Such an excess of primary or traumatic amputations in the country returns ought to have weighed heavily against the chances of success of the country operations, and no doubt did so to some extent; and it ought to have weighed correspondingly in favour of the hospital returns. Yet, notwithstanding these advantages, the success on the whole on the part of country as compared with hospital practices, was, as we have seen, more than three to one.

Repeatedly I have found it urged as an objection to the comparison of country with hospital amputations, that possibly the country patients were not so exhausted and weakened at the time of operating as were the hospital patients. But the large class of primary cases at once offers, as an argument against this reasoning, the following proposition—viz.:

PROPOSITION XIII.—*The state of the patients at the time of operating in these (traumatic) amputations is precisely the same in country practice and in hospital practice.*

For the amputations in this class for injuries being necessitated by accident, the patients immediately beforehand must be held as all similar in their state of strength and vital force. They were all alike in the condition of ordinary or normal health a few hours, or a very short time at least, before the operation was resorted to.

Frequently, however, the hospital surgeon amputates in these cases, in a less dangerous set of limb injuries; inasmuch as more cases of them are saved from the amputating knife in country than in hospital practice. For, according to another legitimate

PROPOSITION XIV.—*Primary amputations are chiefly for the worst forms of compound fractures of the limbs; and the hospital surgeon of necessity sometimes operates in a less severe form of these injuries than the country surgeon, and hence ought to be more successful, but is not.*

The surgeon to our large hospitals is not with this, any more than with other complications, so successful as the country surgeon. He loses 48 per cent. of his amputations for injuries; while the country surgeon loses only 11 per cent., or four times less. Yet the country surgeon operates, on the whole, on a more formidable and dangerous, and hence less favourable, class of cases; for he can save from amputation, and conserve and cure without the dismemberment of the patient, various less severe types of compound fracture, which, when removed to hospital, require to be cut off. On this point I have elsewhere adduced the strongest evidence from various authorities, to the effect that severe compound fractures often do perfectly well in the healthy isolated country cottage which would require to be inevitably amputated in the wards of a large hospital.* "In compound fractures," observes, for example, Dr. Redwood of Rhymney, "where there is tissue left that will continue the circulation below the seat of injury, we save the limb. Assistants fresh from hospitals are often astonished at what is attempted and effected in this way." Mr. Davidson of Seaton-Delaval, who has had immense experience in these cases, has related to me the same fact in nearly the same words, and told me how often his assistants (seven in number) are astonished at the results in these cases, as compared with what they had seen in hospital practice. One of the most thoughtful and accomplished hospital surgeons of England, Dr. Heath of Newcastle, who sees much hospital as well as much country practice in these cases, lately stated to me in the strongest terms the same observation as the result of his very extensive experience.

There is another kind of evidence in proof of the greater severity of the cases of injury amputated by the country surgeon—namely, the greater number of deaths by mere "shock" in the practice of the country surgeon. For we may lay this down as another

PROPOSITION XV. — *In consequence of the relative severity of the cases of injury treated by amputation in the country, more die of simple shock in country practice than in large hospital practice.*

In the returns of deaths from the country amputations, as many as 36 per cent. are returned as having died of shock; or 63 cases in all. Of these 63 cases, in 56 the deaths from shock were after amputations for the results of injury, and in 7 after amputations for the results of disease.

Out of 41 deaths in 149 amputations at St. George's Hospital recorded by Mr. Holmes, only 2 are reported as having died of "shock." A larger proportion will probably be found to die from this cause at other metropolitan and large hospitals. But I may recur to this subject under Proposition XVII.†

It has been occasionally averred that our large hospitals are likely to receive the worst forms of injury requiring amputation; and it may be so in some districts and localities, but certainly not in all, for the preceding remarks so far prove the contrary. Some time ago I received from Dr. Bellenden, of Dudley, a return of limb amputations in private practice,—too late to be included in the general table in the March number of the *Edinburgh Journal of Medicine*. He reports to me 22 amputations without a death, 13 of them being amputations of the thigh; and he

* See the evidence on this point of various observers in the Edinburgh Journal of Medicine for June, and in the Brit. Med. Journal of June 13th.

† If these papers had not extended already so very far beyond their intended limits, I meant to adduce, from country returns, some individual series of cases to show the severity of the injuries for which the country surgeon often operates, and operates successfully. On this point see my paper "On Hospitalism" in the *Edinburgh Journal of Medicine* for June, chapter vi. For a similar reason I have not dwelt on the question as to whether the urban or rustic character of the patients influenced to any extent the results. As I have stated elsewhere, in the late American and German wars the sizes and structure of the hospitals, and their palatial or cottage, barrack or tent nature, affected the results, where the inmates were *all* of the same class or classes, and not men merely urban or merely rustic. I have heard it stated that in London hospitals the country patients recover after operation better than the city patients. In our Edinburgh Infirmary, Mr. M'Dougal finds that after amputation the country patients die in a slightly larger proportion than the town patients.

adds a remark showing that in some places cases of minor injuries are forwarded to hospital, and the graver accidents retained at home, the men being too damaged to be forwarded to a distance. "Most of the removable accidents," writes Dr. Bellenden, "in our collieries and works are taken to the South Staffordshire Hospital, the worst cases are left behind." "I do not hesitate," he adds, "in asserting that cases sent to the hospital are much more lingering than similar cases treated in their own homes."

Formerly it was sometimes supposed and argued that hospital amputations were so much more dangerous and fatal than country amputations, in consequence of the hospital cases being more severe, and the patients dying from the mere effects of shock. These observations rebut entirely this kind of vague reasoning. Nay, more: we have seen under Proposition VII. that the greatest amount of proportionate difference between the death-rate of limb amputations in hospital and in country practice is in amputations of the forearm, forearm amputations being twenty or thirty times more fatal in large hospital than in private country practice; and yet no one could argue that this vast difference was ascribable either to shock before or shock after this, the least of the four major amputations of the limbs.

PROPOSITION XVI.—*Amputations of the thigh for disease are more common in infirmary than in country practice, but are three times more dangerous in hospital than in rural practice.*

Tubercular disease of the joints and bones is by far the most common cause of pathological amputations of the thigh, and to a less degree of the leg also. "In common practice," long ago observed Sir Charles Bell,* "amputation is performed, ninety times in a hundred, for ulcer with carious bone, and for white swelling of the joints." These, like other cases of scrofulous disease, are far more likely to be cured—where a cure is possible—when the patients are under salutary country influences than when shut up in the wards of a large city hospital. But they form a class of cases which naturally gravitates towards large hospitals. The patients are invalided, crippled, and bedridden for weeks and months, and sometimes for years. If belonging to the poorer classes, they often thus exhaust betimes their own little means, the means of their relatives, friends, and neighbours; and perhaps get aid begrudingly from official sources. The prospect of a possible cure, of more generous diet and wine, and of more absolute rest, draws them naturally to a city hospital; and the country medical practitioner has no objection, but the reverse, as it rids him of much responsibility and trouble in such an unfavourable set of cases. If the case is not a fit one for resection of the joint, or removal of the diseased bones, amputation as a matter of necessity is ultimately and properly had recourse to. In the 2098 country, and 2089 hospital, amputations which I have already published, there was in each set a nearly equal number of primary or traumatic amputations of the thigh—viz., 313 in the country lists, and 304 in the hospital lists. But of pathological or diseased amputations there were only 356 amputations of the thigh for disease in the country returns, and as many as 631 in the city hospital returns.

When the operation, however, of amputation of the thigh for disease was practised upon the patients in the country in their isolated homes, the success of the operation was far greater than when they were immured within the walls of a large hospital. For, when operated upon in their own houses, only 12 in the 100 died; whilst, when operated upon in hospitals, as many as 37 in the 100 died; or, in other words, the thigh amputations for disease proved three times more deadly in city hospital wards than in country private dwellings.

Mr. Holmes, as we have seen under some previous propositions, confuses the two questions of the rates of death after amputation and the causes of death after amputation. On, however, this latter and favourite subject of his I have published some returns as to the 2000 odd country amputation cases, which are, I think, of no small value; for they go to prove, as another proposition, this fact, viz.—

PROPOSITION XVII.—*The causes of death after limb amputations differ in some important points in large hospitals and in private country practice.*

Among the 2098 country amputations reported to me, 227 died. The causes of death have been returned to me in 173 out of these 227 cases, giving in every probability a fair average of the whole. Of these 173 cases, 63 are stated to have died of shock; 8 of pyæmia; 28 of exhaustion; 18 of gangrene of the stump; 9 of secondary hæmorrhage; 11 of tetanus; 13 or more of internal injuries; 23 of miscellaneous causes, as pneumonia, phthisis, diarrhœa, convulsions, anasarca, &c.

Contrast this with the causes of death in a metropolitan hospital—such, for example, as the one to which Mr. Holmes belongs—viz., St. George's. Apparently from faith in the fact that amputations form the best test of the salubrity and status of an hospital, an "amputation book" was begun in St. George's in 1852, and, with slight exceptions, has been continued downwards to the present time. In the *Medical Times* for 6th April, 1861, Mr. Holmes has published the results of the first 149 cases entered in this amputation book.* Of these 149 operations 41 proved fatal. The causes of death are entered by him in percentages. The following table shows the differences between these 41 cases and their causes of death after amputation in a metropolitan hospital, and 173 cases and their causes of death in private country practice.

TABLE IX.—*Percentage of different causes of death after amputation.*

| Causes. | In 41 fatal cases in St. George's Hospital. | In 173 fatal cases in country practice. |
|---|---|---|
| Shock† ... ... ... ... ... | 5 per cent. | ... 36·4 per cent. |
| Pyæmia ... ... ... ... | 58·5 „ | ... 4·6 „ |
| Exhaustion, without hæmorrhage ... ... ... ... | 17 „ | ... 16·2 „ |
| Exhaustion, with secondary hæmorrhage ... ... ... | 9·7 „ | ... 5·2 „ |
| Visceral diseases ... ... | 9·7 „ | ... 12·7 „ |
| Diffuse inflammation and gangrene ... ... ... ... | 2·4 „ | ... 10·4 „ |
| Tetanus ... ... ... ... | — „ | ... 6·3 „ |
| Other injuries ... ... ... | 2·4 „ | ... 7·5 „ |

I have interpolated this proposition respecting the causes of death in a metropolitan hospital like St. George's and in country practice, for the purpose of adding the following as another and still more important proposition—namely,

PROPOSITION XVIII.—*The causes of death which Mr. Holmes points out as the reasons for the greater mortality of amputations in the Parisian as compared with the London hospitals are the same causes that produce the greater mortality of amputations in our large British hospitals as compared with country practice.*

After describing the different death-rates in Parisian and in London hospitals, and showing those of Paris to be "evidently enormous" as compared with those of London, Mr. Holmes states that the differences are certainly not explicable by differences either in the constitution of those operated upon in the French hospitals, or in the nature of the injuries or diseases for which they are admitted; and then adds, "Indeed it is allowed that pyæmia and such diseases are in great measure *the causes* of these alarming results" (p. 563). Elsewhere, after showing, by instances, that in English hospitals the "intensity of the traumatic atmosphere is competent to engender erysipelas and pyæmia," Mr. Holmes adds:—"The above teachings are entirely in accordance with the opinions of those who maintain that the prevalence of erysipelas, pyæmia, and the like in the Paris hospitals is due to hygienic defects. It is known that some French authorities, while admitting the fact of the greater prevalence of these affections in their hospitals than in the hospitals of England, maintain that the difference is chiefly due to constitutional differences between Frenchmen and Englishmen. If it could be clearly shown that the relatively greater number of deaths among Frenchmen after operations and injuries was due to shock, this view might possibly be tenable; but it can scarcely be accepted as the true one if the deaths can be shown to be (as in fact they are) due to the supervention of special complications, known to be natural consequences of certain defects of hygiene,

* See his System of Operative Surgery, vol. i., p. 386.

* In the first volume of St. George's Hospital Reports Mr. Holmes has more lately published an account of the first 300 cases in this "amputation book;" but the account of the deaths is so involved that I have, for the sake of certainty, followed the more simple account in the Medical Times.

† Mr. Holmes gives the deaths from shock in one table; but not in his final table of percentages. Hence this percentage column appears so far in excess in its numbers.

which very defects prevail, with scarcely an exception, in the hospitals of Paris." (p. 549.)

In these passages we have laid down for our guidance by Mr. Holmes two pathological principles or rules:—

1st. That if the "enormous" Parisian death-rate were the result of some general debility in the constitutions of the Parisian hospital patients, they ought to present a "relatively greater number of deaths due to *shock*." But—

2nd. It is "pyæmia and such diseases" that are, in great measure, the causes of the enormous mortality of surgical operations in the Parisian as compared with the London hospitals.

Exactly, however, in the same way, we have equal and indeed still stronger evidence to the effect that the "enormous" death-rate after limb amputations in large British hospital practice, as compared with country practice, is not owing to constitutional debility and consequent greater number of deaths by shock in the hospital patients; but, on the contrary, is the result of pyæmia and those congener affections which are the "natural consequences" of defective hospital hygiene.

I depend for the present upon the proof of all this as furnished in the writings of Mr. Holmes himself. Let us glance first at the question of the evidence of the amount of—

1. *Death by shock.*—Under Proposition XVII. we have seen evidence regarding the relative frequency of death by shock after amputations in St. George's Hospital and in country practice as amounting to this:—

In country practice 36 in 100 die of shock.
In hospital „ 5 in 100 „

Hence, therefore, as we cannot account for the "enormous" differences between the death-rate in Parisian as compared with English hospitals by finding the Parisians less able to bear amputation, as tested by more of them dying of shock, so we cannot account either for the "enormous" differences between the death-rate in large British hospital practice as compared with country practice by finding the hospital patients dying in comparatively greater proportion by shock; for the very reverse is the fact.

2. *Death by pyæmia, &c.*—According to Mr. Holmes and most modern surgical pathologists, pyæmia or surgical fever is the most common cause of death in hospitals after amputation and other operations (see the quotations under Proposition VIII.); and in the passage cited one or two paragraphs back, Mr. Holmes expresses the general opinion that the high mortality of the amputations in the Parisian hospitals is due to this pathological cause. Pyæmia is shown to be the cause of death in *more than a half* of those that die in St. George's Hospital. (See Table IX.). Mr. Bryant, the well-known surgeon of Guy's Hospital, in an excellent paper "On the Causes of Death after Amputation," came to the conclusion that, in the hospital to which he is attached, "pyæmia is the cause of death in 42 per cent. of all fatal cases of amputation;"* and Mr. Holmes criticises this as probably too small. Perhaps we may justly hold, as a mean between the two, 50 per cent. of the deaths after amputation in our large hospitals as the result of pyæmia.†

To what extent is this fatal complication, pyæmia, the cause of death in country amputations? Pyæmia is returned as the cause of death in 8 out of 173 fatal cases in which the various pathological causes of death are reported to me.‡ Hence we have this general result from those observations, that

In fatal country amputations, 5 in 100 die of pyæmia.
In fatal hospital amputations, 50 in 100 die of pyæmia.

If, then, pyæmia and its analogous diseases form, by their relative prevalence, as Mr. Holmes correctly maintains, the great cause of the "enormous" difference between the death-rates after amputation in the hospitals of Paris and the death-rates after amputation in the hospitals of London, it forms also, with its congeners, one of the great, or indeed the greatest cause of the enormous difference, in the death-rates in England, between large hospital practice and private country practice, as expressed in our present proposition.

The relative prevalence of this formidable and fatal complication within the walls of St. George's Hospital, with three or four hundred inmates, and the district without, from which the hospital chiefly derives its patients, containing a population of thousands, or tens of thousands, is presented by a statement made by Mr. Holmes in one of his papers in THE LANCET. From 1865 to 1868 there originated 81 cases of pyæmia within the walls of St. George's Hospital; while during the same period 9 cases applied for admission from without. Few facts perhaps could shew more clearly the usual hospital origin and character of this dreaded disease.

*(To be continued.)*

* Medico-Chirurgical Transactions, vol. xlii., p. 87.

† In a table kindly drawn up for me by Mr. M'Dougal of the causes of death in 72 fatal limb amputations in the Edinburgh Infirmary from October, 1865, to October, 1868, 34, or nearly a half, died of pyæmia, and 11 of shock.

‡ See Edinburgh Journal of Medicine for June.

# ON A PURELY MILK DIET IN THE TREATMENT OF DIABETES MELLITUS, BRIGHT'S DISEASE, DISEASE OF THE SUPRA-RENAL CAPSULES, FATTY DEGENERATION, &c.

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DAZZLED by the light which modern improvements in the microscope and the rapid development of organic chemistry in recent years have thrown on the study of pathology, the attention of medical philosophers has been much too exclusively devoted to the investigation of this subject, to the great neglect of therapeutics. Without desiring to underrate in the slightest degree the value of modern achievements in the domain of pathology, it must be admitted that our efforts to improve therapeutical knowledge have not been nearly so strenuous, and that improvements in the latter and more important branch of medical science have not advanced *pari passu* with those of the former. This is much to be regretted, because, if our knowledge of the treatment of disease is not improved in the same ratio as our acquaintance with its nature, we shall be compelled reluctantly to confess that our pathological attainments are, in reality, more ornamental than useful, and that much of labour and success has been fruitless. Further, we are constrained to admit, that since the dawn of modern pathology the dietetic treatment of disease, as a branch of therapeutics, has been wofully neglected. In our own language, we cannot boast of any complete modern text-book on the subject—a deficiency which, let us hope, will soon be remedied.

In treating of milk as a therapeutic agent in the present contribution, it is not intended to discuss its physical properties, its chemical composition, or its physiological relations. There are, however, a few general facts connected with it to which it will be necessary briefly to advert. In the first place, milk is an animal secretion destined exclusively for the purpose of food; this being its *only function*. It is a secretion closely resembling blood, both histologically and chemically; and containing all the proximate alimentary principles requisite to form a perfect species of food, deficient in nothing. It is employed exclusively as the food of *all* young mammals, however varied their ultimate food may be, at the dawn of animal life, when the digestive organs are most imperfectly developed and their functions most feebly performed, but when, nevertheless, the processes of nutrition and growth are most active. Consequently, as food, milk is much more easily digested and assimilated than any other alimentary substance with which we are acquainted; in other words, it is much more easily and rapidly converted into healthy blood and tissue. As food, milk requires no cooking. In short, it may justly be regarded as a natural device for the transference of the blood of the adult mother into the vascular system of the young mammalian—*a kind of natural transfusion*.

These are important facts in relation to milk, which should ever be carefully remembered. There is another subject, however, in relation to it deserving of far more attention and careful investigation than it has hitherto re-

ceived—namely, the extent to which substances extraneous or foreign to its composition can be introduced into it through the food of the female secreting it; so that it may act either medicinally or toxically, as the case may be, on those partaking of it, young or old. That it is so impregnated is a popular belief as old as the Christian era, as appears from the information of Pliny the elder, who says:* "Arcades quidam non medicaminibus uti, sed lacte circa ver, quoniam tunc maxime succis herbæ turgeant, mediocenturque ubera pascuis. Bibunt autum vaccinum, quoniam boves omnivoræ sunt in herbas." "The Arcadians indeed use no remedies except milk about the spring-time, since then the udders are most distended with the juices of the herbage, and are medicated with the pasturage; since oxen browse on all kinds of herbs."

Galen countenanced this ancient popular belief, and recommended† that cows should be fed on certain plants, which he names, so that their milk may be medicated, and thus rendered fitter for the uses of the physician. Indeed this doctrine seems to have survived to comparatively recent times, as Baccius, physician to Pope Sextus V., and Professor of Botany in Rome in the latter part of the fifteenth century, informs us in his writings,‡ that in Italy, especially at Naples, meadows were specially cultivated and applied to medical purposes; certain plants were cultivated in them according to the direction of physicians, and these served as pasturage for animals kept to yield milk for invalids. Each sick person was allowed a cow, a goat, or an ass, according to the nature of the case; this he led to graze on the particular spot, on which grew the plants best suited for his malady.

At the present day the influence of medicines and of deleterious substances or poisons on milk is a subject almost entirely neglected; all we know of it being that most soluble saline substances absorbed into the blood pass into the milk, and that mercurial compounds taken by the mother for the cure of constitutional syphilis have been known to heal the infant at her breast of the same affection as well as herself. Considering the great importance of the subject, it is exceedingly unfortunate that it has not had bestowed upon it that attention which it undoubtedly deserves.

But independently of any medicinal qualities supposed to be imparted to it by the food of animals, milk has been largely used as a dietetic remedy, even in the most formidable diseases, from the earliest ages of medicine. Indeed it is only in recent years it has fallen into comparative neglect; but in a contribution like the present the history of the subject, however interesting and instructive, can only be briefly glanced at.

Hippocrates§ first recommends the milk of the ass, and then that of the cow, in phthisis; and as an excellent remedy in gouty affections of the joints and certain other diseases.

Aretæus‖ remarks that if a phthisical patient drinks much milk he will need no other aliment. Alex. Trallianus¶ also extolled milk as a remedy in phthisis.

Celsus** recommends milk as a proper remedy in phthisis and all chronic febrile affections.

Galen strongly advocates the use of milk in consumption, and, for the cure of this and other chronic maladies, was in the habit of sending his patients to reside at Stabiæ, a town in Campania on the sea-coast, now Castelamare di Stabia, two miles below the river Sarno; and if we are to believe the testimony of a later physician, Patinus,†† they returned cured: "Galenus quidem ad Stabiam montem ægrotos suos ablegabat, unde sani redibant." This locality was celebrated for its fountains, and such was the richness of its pastures that its milk was considered more wholesome and nutritious than that of any other country;‡‡ and in consequence of the benefits derived from it by invalids, the inhabitants of Stabiæ obtained from the Emperor Geta a medal representing a cow.

In short, to whatever authority we turn for information, we find evidence of the extensive employment of milk as a therapeutic agent by the ancient physicians, and, as might be expected, by their more modern successors, with whom their authority had undisputed sway. In this country, more than 300 years ago, physicians prescribed milk profusely—occasionally from the female breast,—and, as would appear, sometimes with remarkable success. Thomas Cogan, M.B., in his "Haven of Health"—a quaint old work, well worthy of perusal, on regimen and diet, published in 1588, in the reign of Elizabeth, for the benefit of the Oxford students,—relates the following remarkable case of one of the Earls of Cumberland:—"Yet common experience prooveth that woman's mylke, sucked from the breast, is without comparison the best of all in a consumption. Whereof a notable example was shewed of late yeares in the olde Earle of Cumberland, who, being brought to utter weaknesse by a consuming fever, by means of a woman's sucke, together with the good counsayle of learned physicians, so recovered his strength that, before being destitute of heires male of his own body, he gatte that most worthy gentilman that now is inheritor both of his father's vertues and honour."

More recently, amongst the writings of the great pioneers of modern medical science, we discover evidence that they, too, fully appreciated the benefits to be derived from the use of milk. Van Swietem says that gouty patients are much benefited by the use of it, and that they continue quite free from attacks of the disease so long as they live *solely on milk*.* Indeed, milk is extolled so much as a remedy for gout by ancient and mediæval writers, that it seems strange that modern physicians have not by experiment determined its degree of efficacy in this malady. The celebrated Hoffmann, too, was a firm believer in the milk cure of disease.†

During the seventeenth and eighteenth centuries several works were written on the milk cure, and on its value as a therapeutic agent. I may cite those of Corteus,‡ Stephens,§ Short,‖ Colombier,¶ Ferris,** and Petit-Radel.††

In the present century, Doehne‡‡ in Germany, Chretian§§ and Serre d'Alais‖‖ in France, in Russia Inozemtseff¶¶ of Moscow, and lastly Dr. Karell*** of St. Petersburg, physician to the Emperor of Russia, have been the principal advocates of milk as a powerful therapeutic agent in the cure of disease. But besides these, a host of other writers of less importance have communicated their experience to various continental journals. In this country we have all but totally neglected the subject.

Dr. Karell's contribution, just referred to, is by far the most important which has yet appeared on the subject. He insists on the importance of administering milk *judiciously*, and of a *strict adherence to method* in its employment, without which he considers it impossible to obtain good results. He has been one of the most zealous propagators of this treatment in Russia and in other countries, and observes: "My perseverance would be fully rewarded were I to see this mode of treatment generally recognised and adopted by medical men, and raised to that rank in therapeutics which, in my opinion, it so justly deserves."

With regard to the class of cases in which the milk treatment is indicated, he says: "I arrive at the firm conviction that in the use of this fluid we possess one of the strongest weapons against that obstinate enemy of practitioners which, in spite of being disguised under various forms of chronic ailments, is, finally, almost always recognised as *a perverted or deficient nutrition*." He gives the history in detail of 15 out of upwards of 200 cases treated by himself, in which the treatment was scrupulously carried out, and in which he obtained the most excellent results, even in hopeless cases in which all other remedies had previously failed. But the reader is referred to Dr. Karell's most valuable contribution, which, notwithstanding the eminent position of its author, has not received in this country the serious attention to which it is justly entitled.

*(To be continued.)*

* Hist. Natur., lib. xxv., cap. 59.
† Method. Medic., lib. v., cap. 12.
‡ Opera, tom. iv.
§ De Affect. Intern., cap. 4.
‖ De Morb. Chronic., lib. iii., cap. 7.
¶ Lib. vii., cap. 1, 2.
** Medicin., lib. iii., cap. 22.
†† Patini Epistolæ, tom. ii.
‡‡ Columella Res Rust., 10.

* Commentaria in H. Boerhavii Aphorismos, tom. iv.
† Hoffmanii Opera Omnia. Genev., 1740. Tom. i., sect. 2, cap. ii., p. 423.
‡ De Facile Medicina per Seri et Lactis Usum. Libri Tres Pap., 1604.
§ Duelus on the Cure of Gout by Milk Diet; to which is prefixed an Essay on Diet. Lond., 1732.
‖ Discourses on Tea, Sugar, and Milk. Lond., 1750.
¶ Du Lait considerée dans tous ses Rapports. Paris, 1782.
** A Dissertation on Milk. Lond., 1785.
†† Essai sur le Lait, considéré Medicinalement. Paris, 1787.
‡‡ Die Milch und Molken-Kur. Leipsic, 1817.
§§ Archives Générales de Médecine, tom. xxvii.
‖‖ Bulletin Général de Thérapeutique, tom. xiv.
¶¶ The Milk Cure. Moscow, 1867.
*** On the Milk Cure. Read before the Medical Society of St. Petersburg, March, 1865; and translated by Dr. Carrick, Physician to the British Embassy at St. Petersburg, in the Edinburgh Medical Journal, Aug. 1866, p. 97.

## A CASE IN WHICH AN ARTIFICAL TOOTH WAS DISLODGED, SWALLOWED, AND IMPACTED IN THE ŒSOPHAGUS; SUCCESSFULLY EXTRACTED.

BY JOHN DEARDEN, M.R.C.S.E.

IT may not be uninteresting to some of the readers of THE LANCET to peruse the following notes.

Mr. H——, aged thirty, presented himself at my surgery at noon of the 30th of August, 1869, and stated that, on taking a glass of water to drink, a front false tooth with the gold plate had become dislodged, and that he had swallowed it. He appeared to be much distressed, and complained of great pain in the epigastric region. I asked him to drink a little water; after doing which he complained of great pain and difficulty in swallowing about the spot above described. I proceeded to pass a probang, measuring fourteen inches; about eleven inches of which passed readily enough, when it came against some hard resisting body, which I took for granted was the tooth. I immediately tried to force it down, but to no avail. Having no forceps long enough, I at once fixed on the probang about twenty nooses of strong horsehair, the nooses lying upwards, as will be seen by the engraving. I passed it down, and with much difficulty succeeded in getting it past the obstacle. I then made gentle traction; and manipulating until I found that some of the nooses had become fixed, I then increased the force, but found the resistance so great that it seemed impossible either to bring up the probang or the tooth. At last the horsehair gave way, and the probang came up, leaving the tooth in the same place. I repeated the operation several times with little better success, the horsehair being most often cut through; once the tooth was drawn as high as the cricoid cartilage. I resolved upon trying fresh material for the nooses, and having some very fine steel wire, which I use for sutures, with this I armed the probang, and proceeded to pass it, only more readily than before. After a little careful management and considerable force, to the intense relief of the patient, I succeeded in extracting the tooth. The time occupied from first to last was about forty minutes.

Sept. 8th.—With the exception of soreness for the first few days after the operation, and restricting himself to a farinaceous diet, the patient has felt no inconvenience, and is now perfectly well.

FIG. 1.

FIG. 2.

FIG. 3.

Figs. 1 and 2 are accurate representations of the artificial tooth and plate. The measurement from point to point is 1¼ in., and from the apex of the tooth to the edge of the plate ¼ in. The spike, which is noticeable on Fig. 2, is ⅛ in. in length; it use was to secure the tooth more firmly by being received into a hole drilled into the old stump.

I need scarcely make any remarks about the difficulty of extraction when the number of points and the very irregular outline of the plate are taken into consideration.

Fig. 3 represents the probang armed with the nooses.

Brook House, Church, near Accrington, Sept. 1869.

# A Mirror OF THE PRACTICE OF MEDICINE AND SURGERY IN THE HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum allorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

## ST. GEORGE'S HOSPITAL.

### CASES OF PHAGEDÆNA.

So much has been written lately about the healthiness of the large London hospitals, that it may be worth while to relate the following five cases of phagedæna, admitted into St. George's Hospital, as bearing upon the question. Mr. W. Leigh, the surgical registrar, has obliged us with the notes. Up to the present time, these cases are the only ones of the kind that have come under notice at that hospital this year. They have all occurred since the latter end of June; and, as will be seen, they came from various localities—three from the crowded districts of Chelsea and Pimlico, and the other two from a healthy part of Kensington and from Hampton respectively. In only one case did the sloughing continue for a longer period than two days after the patient's admission; and though all, with the exception of the last case (which was placed in a separate room), were placed in wards containing patients with various kinds of wounds, in no instance was any wound in the hospital attacked with phagedæna. In Case 3 the sloughing certainly had ceased before the patient was admitted, and therefore there might be less chance of its spreading and attacking neighbouring wounds; still it shows that even the country village of Hampton is not free from phagedæna. The treatment consisted in supporting and even stimulating the patients, with the free administration of opium. Locally, poultices with a stimulating ointment were applied till the wound took on a healthy form.

CASE 1.—Harriet B——, aged twenty-two, married, living at Westbourne-street, Pimlico, was admitted into Wellington ward on June 29th, under the care of Mr. Holmes. The history she gave was that two years ago she had fever, and had always been delicate since. Twelve months ago she knocked off the skin from her right leg, which had never healed. For two weeks it had been inflamed, very painful, and rapidly increasing in size. On admission she was pale and in a weak state. There was a large sloughy ulcer, about four inches in diameter, on the outer side of the right leg; the skin around was much inflamed; the edges of the ulcer were sharp and everted. She was ordered ordinary diet; a pint of porter and three ounces of port wine daily; tincture of opium, ten minims, with fifteen grains of chlorate of potash; quinine and iron. Two days after admission the edges of the ulcer were healthy and the slough separating. She was discharged from the hospital July 17th, with a healthy ulcer almost healed.

CASE 2.—John J——, aged thirty, a labourer living at Earl's-court, Kensington, was admitted into Grosvenor ward June 30th, under the care of Mr. Hewett. Ten years ago his left leg got wounded by a stone rolling against it, and had been ulcerated at times ever since. Ten days before admission it became very painful, and got rapidly larger. On admission, there was a large phagedænic ulcer, the size of a man's hand, on the inner side of the left leg; very painful; edges everted and spreading. He was ordered ordinary diet; one pint of soup and one pint of porter; tincture of opium fifteen minims, chinchona draught, thrice daily. On July 2nd the slough had not spread, and the

man was in much less pain. The slough separated a few days later, and the patient when the report was made was in the hospital with a healthy ulcer, healing.

CASE 3.—Charles J——, aged thirty-eight, an ironworker, living at Hampton, was admitted into Grosvenor ward on July 7th, under the care of Mr. Pollock. Two years ago he noticed a swelling over the left knee; eight weeks ago the skin gave way, and one week ago the ulceration began to spread. He had had rupial ulceration some years before. On admission, there was an inflamed ulcer, about four inches in diameter, over the left knee; the edges sharp, cut, and everted; slough almost entirely separated; numerous rupial scars about arms and body. He was ordered ordinary diet, one pint of porter, tin minims of tincture of opium, with fifteen grains of chlorate of potash, quinine and iron. On July 10th the opium was replaced by five grains of iodide of potassium. The ulcer rapidly assumed a healthy character, and is now fast healing.

CASE 4.—Nicholas L——, aged thirty-five, a labourer, living in Marlborough-road, Chelsea, was admitted into Grosvenor ward on July 16th, under the care of Mr. Pollock. Five weeks before, after connexion, he noticed a sore on penis. Three weeks ago it commenced to spread, and to slough. He had had syphilis twelve years previously. On admission, there was a large sloughing sore round the base of glans penis; edges everted, and sloughing extending. He was ordered ordinary diet and one pint of porter; iodide of potassium, ten grains; water, three ounces: three times a day; compound ipecacuanha powder, ten grains, every night. For a few days the sloughing did not seem to spread, and a tubercular eruption broke out on his face; half a drachm of mercurial ointment was rubbed in every night. The sloughing again extended, and rupial sores broke out on various parts. He was ordered one drachm of opium and half a pint of water for a lotion; citrate of iron, ten grains; iodide of potassium, ten grains; water, one ounce: three times a day; opium, one grain, every four hours. It continued to spread for about ten days, and then stopped, after having destroyed the greater part of the skin of the penis and a portion of that of the scrotum. The wound is now quite healthy.

CASE 5.—Henry H——, aged fifty, lately living in Chelsea, was admitted on August 4th, under the care of Mr. Pollock. Had syphilis thirty-five years ago, twelve years previously rupia, and one week ago a pimple formed on the inner side of the left leg; skin gave way, and an ulcer rapidly spread. On admission, there were rupial scars about the face, nose, and legs. There was a sloughing ulcer, the size of a child's hand, on the inner side of the left leg; edges everted, and sloughing extending. He was pale, and looked much older. Ordered ordinary diet, and a pint of porter; iodide of potassium, ten grains; tincture of opium, fifteen minims; chlorate of potash, twenty grains; a draught of quinine and iron every six hours; six ounces of port wine daily. On Aug. 6th the sloughing had ceased, and slough beginning to come away. The wound is now quite healthy.

Since the preceding was written, one other case has been admitted; but no wound in the hospital took on an unhealthy form from its admission, though it was placed in a ward with fifteen other beds in. The following is a short notice of the case:—

William W——, aged thirty-four, a labourer, living in King's-road, Fulham, one month before knocked the skin off the front of his left leg. It nearly healed; but three days ago it began to get very painful, and rapidly increased in size. On admission, there was a sloughy ulcer on the front of the left leg the size of a penny; edges sharp and everted. He was ordered twenty minims of tincture of opium, fifteen grains of chlorate of potash, and chinchona draught, three times a day; with meat and porter. The ulceration did not spread after his admission. The slough separated, and the ulcer is now rapidly healing.

## KING'S COLLEGE HOSPITAL.

### CEREBRAL HÆMORRHAGE IN A PATIENT TWELVE YEARS OF AGE; HEMIPLEGIA; APHASIA; SUBSEQUENT MENINGITIS.

(Under the care of Dr. KELLY.)

THE source of the hæmorrhage in the brain in the following case seems to have been due to previous plugging of an artery by a detached vegetation in the left ventricle; and it is the more likely as there was evidence of a similar plug in the kidney. The plug, having caused atrophic softening in the brain, some large vessel probably gave way through losing its support; and this took place on Aug. 1st, when the boy was suddenly seized with his illness. In three or four days meningitis supervened in consequence of the effused clot acting as a foreign body in the brain. Although the patient's heart was frequently listened to, no bruit could be heard. It was evident from the symptoms that the lesion involved the front part of the left hemisphere; but it was not until after death that the nature of the disease could be clearly made out.

H. C——, aged twelve, was admitted on Aug. 2nd. He had always had good health, and had never suffered from any previous illness. On July 24th he complained of pain in the left side of his head, but had no convulsion; he ate and slept well. On Aug. 1st he partook very freely of gooseberries and currants, and in the night his mother was alarmed by hearing him scream out. He was soon afterwards brought to the hospital in a state of complete insensibility. He was a strumous-looking lad, and his fingers were much clubbed. He lay on his back, breathing in a stertorous manner. His left eye was much suffused, and the pupil larger than the right one; there was also a slight convergent squint, but this he was said to have had for a long time. There was no paralysis either of the face or side, nor had he any fits, but occasionally moved his limbs in a restless manner. All over the chest were heard mucous râles and sibilant sounds; the heart's action was quick and irregular, but no bruit could be heard. There was no rise of temperature, nor any tache cerebrale. An aperient was given him, and also an enema of castor oil. By this means an immense quantity of undigested fruit was brought away. After this he seemed a little better, and was able to swallow a little milk.

In a few days the temperature began to rise, and continued to do so during the whole of his illness; it ranged from 99° F. to 103° F., and at times the daily variations were very great, varying from two to three degrees between the morning and evening observations.

Aug. 5th.—His face was pale, and the pupils nearly equal, but they acted sluggishly to light. The lung sounds were now quite normal, and he seemed to be rather more conscious, and could take his food better. The pulse was irregular and rapid, and the heart's impulse stronger than usual. He was placed on milk and beef-tea diet. There were no convulsions nor twitchings of the extremities, nor did he vomit at all until towards the end of his illness.

10th.—He seemed more sensible, and was able to take a little rice pudding. He knew when his meal-time came, but could not ask for anything. He had at first passed his motions unconsciously, but now he had control over his rectum and bladder. It was now noticed that his face was slightly paralysed on the right side, and also that the right arm and leg were motionless; this was more marked afterwards, but at no time was the facial palsy complete. It was difficult to make out whether sensation was impaired, as he was in such a stupid condition. It was observed also that he never used any other word than "water"; whenever he wanted anything or recognised anybody, he always said "Water." Not being able to write, it was impossible to make out how far his handwriting was altered.

No marked change occurred until the end of the month, when his temperature rose higher, and he was occasionally delirious; his tongue, which before was moist, was now brown and dry, and his lips and teeth covered with sordes. He was never convulsed, but his left arm and leg were occasionally drawn up. The last day or two of his life, he lay perfectly unconscious, in a state of low, muttering delirium. At no time was any bruit heard over the heart, but the impulse was greater than usual.

A post-mortem examination was made twelve hours after death. The body was much emaciated, and of a sallow tint. On removing the skull the dura mater was found normal; there was some soft recent lymph over the anterior part of the frontal lobes on either side of the falx cerebri; a little fluid was found at the base; all over the base there was recent lymph gluing the parts together, and most abundant along the course of the nerves and large vessels; no

grey tubercle was met with in the fissure of Sylvius or elsewhere. The ventricles were much distended with fluid and their lining membrane thickened and softened; there was some soft lymph over each choroid plexus. On the left side, in the middle lobe, was a clot of firm, coagulated blood as large as a plum, and nearly circular; internally it was bounded by the optic thalamus, which was partly destroyed by the surrounding softening; externally it extended to within half an inch of the circumference; behind it reached as far as the optic thalamus, and in front had partially destroyed the frontal convolution. But around the clot, for at least half an inch in every direction, the brain-tissue was much softened. There was no atheroma nor plugging of the arteries, but they were difficult to dissect out because of the adhesions. No aneurism was seen, nor were the venous sinuses plugged. Both lungs were congested, and the right base was partly solid from pneumonia; it was red and granular on section. Attached to the aortic and mitral valves were large, recent vegetations; some also were attached to the cords of the mitral valve, and had a loose, free extremity, from which a portion could be easily detached. There were no clots in the heart, and no alteration in the lining membrane. In the left kidney was a puckered cicatrix; in other respects the kidneys were healthy. All other organs in the body were quite healthy.

# Provincial Hospital Reports.

## HEREFORD GENERAL INFIRMARY.

DISLOCATION OF THE RIGHT KNEE-JOINT; RUPTURE OF THE POPLITEAL ARTERY; DRY GANGRENE; AMPUTATION; RECOVERY.

(Under the care of Mr. VEVERS.)

G. D——, aged twenty, an agricultural labourer, in good health, in ascending a ladder with a sack of corn, fell, dislocating the head of the right tibia forwards. He is unable to describe the manner in which he alighted. He was admitted on November 10th, 1869.

On examination, the limb was found to be free from ecchymosis. The lower end of the femur had been thrust into the popliteal space, behind the head of the tibia, stretching, but not rupturing, the integuments, and producing marked deformity. The foot was swollen, painful, benumbed, and cool, and pulsation was not perceptible in the posterior tibial artery. Reduction having been effected by flexion and slight extension under chloroform, the limb, somewhat bent at the knee, and with the foot raised, was placed upon a double-inclined plane. Subsequently, discoloration of the foot, and later of the calf, took place, varying in hue from black to brick-red, and white; the extremity became quite cold, and blebs appeared, accompanied by gradually ascending insensibility of the leg.

On the 19th of November a line of demarcation commenced a little below the knee. There was remarkable freedom from constitutional disturbance throughout.

November 20th. — Amputation was performed, under chloroform, in the lower third of the thigh, by antero-posterior flaps; these were brought together with wire sutures, and covered with lint soaked in carbolised oil. The stump rapidly healed, having exhibited neither redness nor tumefaction. An inconsiderable amount of pus exuded, chiefly from the ligature tracks.

January 2nd, 1869.—Discharged, quite well.

*Condition of the limb.*—Although the popliteal artery was found to have been ruptured opposite the flexion of the knee-joint, there was little extravasation of blood; both ends of the torn vessel were well contracted, and drawn within its cellular sheath. A considerable clot occupied the upper portion, extending as a white cylinder of small size about half an inch beyond the first collateral branch. The lower portion was well, but less securely, plugged. At the point where the venæ comites unite, and upwards as far as their junction with the external saphena, the veins were full of dark blood, nearly resembling treacle. In this situation they presented a fusiform appearance; and above, the popliteal vein was contracted. Below, they were similarly distended, and there were large patches of extravasated blood on the muscular surfaces, and in the cellular tissue. The popliteal nerve was smaller, stained, and flattened out, as if from pressure, where it rested on the swollen vein; the fibrillæ were also separated from each other. The external lateral ligament was completely, and the internal partly, broken at the condyles; and there was a large rent in the ligamentum posticum of Winslow, fully exposing the back of the joint. The crucial ligaments were torn through their centre, yet the articular surfaces of the femur and tibia retained their proper relative position.

# Medical Societies.

## CLINICAL SOCIETY OF LONDON.

FRIDAY, OCTOBER 8TH.

MR. PAGET, PRESIDENT, IN THE CHAIR.

### PRESIDENT'S ADDRESS.

MR. PAGET urged the members of the Society, not only to be active in writing and debating, but to be in all their work in the Society strictly clinical. He said that he feared there existed, even among the members of the Society, too little faith in the power of clinical research,—too great readiness to doubt all results and all suggestions which are not according to our beliefs in physiology or anatomical pathology,—too great readiness to accept and act upon deductions from other sciences, though they are not approved by clinical evidence. He vindicated the claim of clinical science to be considered, in the same degree as any other science, self-sufficient. Self-sufficient, indeed, no science could be, all being bound together by common facts and mutual illustrations, and the same cardinal rules of study. But, in whatever degree self-sufficiency and self-reliance might be allowed to any department of science, in consideration of the speciality of its subject-matter and of its method of investigation, in that same degree might self-sufficiency be justly claimed for clinical science. It could not be objected that in claiming the rights of special clinical study, too narrow a field of inquiry would be enclosed. The field would be found wide and large enough for every member of the Society to take a different subject or method of investigation, and make of it the work of a life. The new nomenclature of diseases did not enumerate all the subjects; but, many as they were, each might advantageously be studied in many different ways. Of the most promising methods were pointed out—the collection of cases undisturbed by treatment; of rare cases; of large collections for deductions from mere numbers of the simplest facts; of groups of cases having one striking common character, such as the character of explosion of nerve-force, or that of nerve-storms; of clinical coincidences, such as those of diseased renal capsules with coloration of the skin; and clinical sequences, like those of syphilis, in likeness to which it appeared probable that others might have trains of consequences extending over far longer periods of time than they had yet been traced in. Referring to therapeutical inquiries, in which disappointment had been expressed that the Clinical Society had achieved no great results, the necessity was pointed out of discriminating between the management of a disease and the cure of it. No one talked of curing pyæmia or of managing ague. We manage pyæmia, helping the patient to live while, by natural processes, the disease continues, and then subsides: we cure ague. In respect of cures, there seemed too great a tendency to adopt the popular belief that for every disease there must be a remedy; whereas, there is rather no reason to be given from the nature of things why any disease should have a remedy; and in all biology there appears no more singular fact than the real cure of disease, after the manner of ague by chinchona, or syphilis by mercury and iodide of potassium. Such facts as these cannot but be rare, and very difficult of discovery; but the search for them was one of those lines of inquiry in which the reward of success would bear a just proportion to the toil for achieving it. If every member of the Society, according to his power, or taste, or opportunities, would choose his own subject, and his own mode of

research, and work in it heartily, the Society would enact the highest ideal of a well ordered association, wherein each man does as much as he can of that which he can do best.

After the President's address,

Dr. W. H. DAY read a paper on the Hypophosphates of Iron, Quinine, and Strychnia in cases of general debility and nervous exhaustion, illustrated by cases showing their mode of action to be primarily through the nervous system, and secondarily through the blood. He believed that results might be calculated on from these remedies when combined which could not be obtained from them when separately administered.

Dr. CLAPTON read a paper on the Effects of Copper upon the System. Several cases were related which had been under his care as out-patients at St. Thomas's Hospital, and the results given of numerous inquiries which he had made personally at various copper works in London. Several noteworthy phenomena were described, as the presence of distinctly marked green stains on the teeth close to the gums, bluish-green perspiration, hair of a greenish hue in old workmen, and green discharge from old ulcers. All these points were illustrated by the exhibition of workmen and specimens. Proofs were adduced to show that these colorations were due to absorption, assimilation, and elimination of the copper, and not to a mere local deposit. The probable reasons were given why copper workmen (although an unhealthy-looking class, and subject to considerable muscular debility) do not suffer from any specific diseases, as do the workmen in most other metals. Investigations at each of the works elicited the remarkable fact that the men have always escaped cholera and even choleraic diarrhœa, although their neighbourhoods suffered severely during the great epidemics.

## OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, OCT. 6TH, 1869.

DR. GRAILY HEWITT, PRESIDENT, IN THE CHAIR.

THE following gentlemen were elected Fellows:—Dr. Bantock, Mr. Boyd, Dr. Caskie, Mr. Godden (Birkenhead), Dr. Hardinge, Mr. Milward (Cardiff), Dr. Oxley (Liverpool), Dr. Russell (Messingham).

Dr. BARNES exhibited the Head of a Child delivered by Cephalotripsy, with the instrument (Hicks's) attached. The case was that of a wretchedly deformed rickety creature, aged nineteen, admitted, in the last week of first pregnancy, at St. Luke's Workhouse, in which his assistance was requested by Mr. Harris. The conjugate diameter was estimated at from 1.25" to 1.50", and the space on either side of the promontory was about the same. Dr. Barnes determined to act at once, instead of waiting for labour. He passed a bougie into the uterus on the afternoon of the 13th of September. At 3 P.M. on the 14th, there was some uterine action; and an appointment was made for 6 P.M. to complete the delivery. This was done, with the assistance of Messrs. Harris, Rogers, and Sison. The medium dilator was applied for ten minutes, and room enough was gained for work. After perforation, the cephalotribe was applied three different times. Some pieces of the cranial vault were removed by the craniotomy forceps, and then the head was extracted by the cephalotribe. The head was so well crushed and compressed that extraction was not very difficult, there never being any considerable pressure upon the mother's parts. The whole operation lasted one hour. The mother did well, although a miserably feeble creature. Dr. Barnes believed the pelvis in this case was the smallest in which cephalotripsy had been successfully performed in this country. The instrument worked admirably, but he thought a less curve would be better. Dr. Barnes at the same time exhibited a cast of a head grasped by the straight instrument of Dr. Kidd, of Dublin, who kindly lent him the instrument.

Dr. HICKS considered this case a very satisfactory proof of the efficacy of the instrument he had modified. He wished, however, again to advert to the remarks he had made as to the advantage of using the cephalotribe as a tractor also; because, although we may compress the head down to not much over an inch at the point of pressure, if the blades are removed, the after expansion of the bones is such that all the advantages of such compression are lost. So that an instrument with blades capable of less approximation, adapted as a tractor, is really more efficient.

The PRESIDENT remarked that one practical deduction to be drawn from Dr. Barnes's case was the advisability of giving the cephalotribe very little curve. It was to be recollected that, in most cases of pelvic deformity, the pelvis was not only narrow, but shallow, and a nearly straight instrument would be generally applicable.

Dr. HICKS would observe, with respect to the President's suggestion, that his later instruments were not so curved as the early examples. As to the concavity looking backwards, he thought we could always arrange that the quarter turn should be so that the concavity should look forwards; because, if we applied the instrument in the transverse of the pelvis, a quarter turn would bring the concavity to one or other side, so that the blades would be virtually straight as far as regards the antero-posterior aspect.

Dr. WOODWARD exhibited his Obstetric Back-Supporter. It consists of a padded plate, on the posterior surface of which two springs are hinged, having their common centre formed by a rack and pinion hinge, by moving which the springs assume an arched form. To the extremities of the springs is attached a belt which encircles the abdomen, so that in their effort to take a curved form, force is exerted against the pad forming the centre of the arc, and the requisite amount of pressure is exerted on the surface covered by the pad. Dr. Woodward said that he had used this apparatus in a large number of labours, and with much benefit.

Dr. BARNES observed that there was nothing new in the principle of support and compression of the uterus during labour. The apparatus exhibited was but another of many ways of giving such support. In his lecture on "Obstetric Support," he (Dr. Barnes) had quoted Kristeller, who described a method of actually squeezing the child out of the uterus by external pressure. The Dublin school, represented by Dr. Joseph Clarke, Collins, and Beatty, had long practised the application of a binder during the expulsion of the child, and the manœuvre of pursuing the uterus in its retreat towards the pelvis by the hands during the expulsion of the child, and of keeping up the pressure upon the uterus afterwards, to ensure full contraction, the detachment of the placenta, and the prevention of hæmorrhage. This practice he had himself always carried out. He was not a little surprised to observe that within the last few years this method had been promulgated in Germany as a discovery by Credé; and a manœuvre which had been in use here for at least a century was actually distinguished by Dr. Credé's name.

Dr. PROTHEROE SMITH, while recognising fully the merits of Dr. Woodward's original design, disagreed with him in the idea that the principle of his supporter had anything in common with the instrument he (Dr. Smith) had exhibited to the Society on the 7th July. Simple compression by a circular bandage, with a lumbar pad, as in Dr. Woodward's instrument, would be insufficient to accomplish the objects he now proposed, that of rectifying the anteverted gravid uterus, and of supplying sufficient support and compression during labour. He was led to say so after a lengthened trial of a bandage for upwards of thirty years, which anyone would remember who had attended his clinical lectures on Midwifery at St. Bartholomew's Hospital. On the subject of compression of the uterus, with a view to expedite labour, Dr. Barnes's remarks were very pertinent, and he fully agreed with him that there was nothing new in it. He would indeed say it was as old as woman, since nature had furnished her with an apparatus for the purpose, which, although all-sufficient in savage life, was impaired in the civilised woman through the evils resulting from her dress. By the combined pressure of clothes suspended around the waist from infancy, the structure of the abdominal muscles becomes so deteriorated as to lose much of its power of contraction, often shown in the dead-house by the attenuated parietes of the abdomen in instances of tight-lacing. When this defect exists, or when power is suspended by the undue employment of anæsthetics, the uterus is overtaxed, and painful or perilous labour may result. To obviate this evil, after many experiments extending over six years, he had produced an instrument which, in brief, he would describe as an artificial skeleton, so constructed as to present, in its pubic, sacral, lumbar, costal, and sternal pads and springs,

all the *points d'appui*, from which a properly-adjusted bandage is made to simulate the action of the lumbo-abdominal muscles. Thus the accoucheur was enabled efficiently to aid the uterus in the act of expulsion, or to rectify its position when anteverted through the laxity of the abdominal walls. In this way the risks of childbirth could be greatly diminished.

*(To be continued.)*

# Reviews and Notices of Books.

*Human Osteology: comprising a Description of the Bones, with Delineations of the Attachments of the Muscles, the General and Microscopic Structure of Bone, and its Development; to which is added a brief notice of the Unity of Type in the Construction of the Vertebrate Skeleton.* By LUTHER HOLDEN, F.R.C.S., Surgeon to and Lecturer on Anatomy at St. Bartholomew's Hospital. Fourth Edition, illustrated by numerous Drawings on Stone, and Woodcuts. London: Churchill and Sons. 1869.

As this is one of the books which every first-year's student should possess, and the contents of which at least he will be expected to have made himself acquainted with by next April, we hasten to notice it, and are sure that he will obtain no better nor more facile guide to a subject which, chiefly owing to the fault of the teachers, was long considered as the driest part of anatomy, but which presents as many beautiful illustrations of design as any other part of the body. An accurate knowledge of the bones has always been admitted to be, not only the foundation of anatomy, but of the highest importance in the practice of surgery. A man may be many years in practice without meeting with a case of hæmorrhage requiring precise anatomical knowledge for the ligature of the vessel from which the blood is flowing; but, especially in country practice, and pre-eminently in the manufacturing districts, cases of fracture and dislocation are constantly occurring, requiring the nicest discrimination and most thorough knowledge of the form, position, and direction of the bones to determine the nature of the injury and the treatment to be pursued. There are some cases, indeed, in which the symptoms are so obscure that the first authorities will differ; but, as a general statement, it may be said that nothing is so disgraceful to the surgeon as to put up a limb in splints for six weeks for what is then discovered to be a dislocation, unless it be to apply pulleys for what turns out to be a fracture. Yet such things have been. By the diligent study of the bones themselves in the articulated as well as in the disarticulated condition, with the aid of such a book as this by Mr. Holden, let us trust that these errors may be things of the past.

Mr. Holden tells us, in his Preface, that the text of the present edition has been thoroughly revised, that a word or a sentence has been here and there thrown in for the sake of a clearer description or a fuller explanation, and that the lithographic illustrations have been redrawn, the original plates having been worn out. When an educational work reaches its fourth edition, and has been very successful, it requires but little notice at the hand of the reviewer. It is to be presumed that teachers and students have alike perceived its advantages in point of general plan and execution, and that in a subject like anatomy, which treats of facts, and not of opinions, any slips occurring in the first edition would be rectified in the second, and *a fortiori*, in the fourth. Still, we have thought it our duty to select one or two of the bones, and compare the descriptions furnished by Mr. Holden with those contained in other text-books of anatomy. We began with the superior maxillary bone, one of the most difficult in the whole body to describe intelligibly, and we must acknowledge that we thought Mr. Holden's account contrasted favourably with those of Cruveilhier, Quain and Sharpey, Ward, and others. It is somewhat less full and precise than these, yet but few points of interest are left unnoticed, whilst it is considerably easier reading, a few surgical facts and noteworthy cases being referred to. Nevertheless, we notice here and there in this bone, as well as in others, slight errors. For example, at page 139 we read, "the clavicle begins to ossify about the sixth week—that is, sooner than any other bone in the body." At page 92 we learn that "the ossification of the upper jaw begins so soon (as early as the *fifth* week), and proceeds so quickly, that the number of its independent centres has not yet been accurately determined." Again, in the account of the temporal, Mr. Holden says, in the most precise way, "the temporal is connected with four bones." We have always thought it was connected with five. Had he said suturally connected, the statement would have been correct.

In a note on page 130 the observation is made that all animals that use their fore limbs for other purposes besides support, such as climbing, flying, burrowing, or holding objects, have clavicles! We should thank Mr. Holden to give us a drawing of the clavicles of a bear, yet a bear is rather handy with his paws. We think the last chapter on the "Unity of Type" requires modification. The cranium, as Mr. Huxley has shown by the light of embryology, can no longer be regarded as homologically composed of four vertebræ. It may be divided into four segments which resemble vertebræ, but they are certainly not homologous with them. The greater part of this chapter should have been recast.

In regard to the drawings, they are for the most part excellent, and the attachments of the muscles are most unmistakably marked, the surface of origin being enclosed in a red, and that of insertion in a blue, outline, with the name of the muscle attached, legibly inscribed. The most indifferent one of the series is probably plate XXVI., for if the nasal duct occupied the position it is there shown to have, it would be impossible even for the most practised hand to introduce a straight probe. On the whole, however, it will be mere want of attention if the student, with a good set of bones, and Mr. Holden's "Osteology" to help him, have not acquired a thorough knowledge of the skeleton, and of the attachments of all the muscles, by the end of the first winter session; and if he have done this, he will have done a good winter's work.

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*Diseases and Injuries of the Eye; their Medical and Surgical Treatment.* By GEORGE LAWSON, F.R.C.S., Surgeon to the Royal London Ophthalmic Hospital, Moorfields, and Assistant-Surgeon to the Middlesex Hospital. Small 8vo. pp. 339. London: Renshaw. 1869.

THE profession is indebted to Mr. Lawson for a valuable addition to Mr. Renshaw's series of useful text-books. Within a small compass, and with extreme care and accuracy, he has succeeded in tracing the broad outlines of modern ophthalmic practice, and in producing a treatise which will serve as an excellent foundation for the clinical work of the student and as a convenient book of reference for the practitioner. Following quickly in the wake of larger volumes by other writers, Mr. Lawson has little to communicate that is new; but he is entitled to the credit of presenting an abridgment of existing knowledge in a highly convenient and useful form.

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DR. SAMUEL HOBART, who has for a number of years been connected with the Cork District Lunatic Asylum, has been obliged by ill-health to send in his resignation, which has been accepted by the Governors, with an acknowledgment of his long and faithful services.

# THE LANCET.

LONDON: SATURDAY, OCTOBER 16, 1869.


THE College of Surgeons of England is a very impermeable body. It has been in the habit of encasing itself within its own customs and privileges as if they were of the nature of eternal laws. It has stuck with dogged pertinacity to the notion of a surgeon without any knowledge of medicine. Opinions and progress have to be very advanced before they penetrate such an institution. But no institution, however privileged, can now afford to disregard what is reasonable. If it will not accept the teachings of time, it is certain to suffer for it. The College of Surgeons is at length penetrated by the general light which is everywhere apparent on the subject of medical education and examinations. There is some reason to think that the College has been too late, for its own interest, in the perception of this light. While it has been opposed to change and improvement, the sister Colleges of the country have been gravely considering the nature and requirements of the times and adapting themselves to them. The Scotch Colleges have combined to grant complete diplomas. The College of Physicians of London, failing to come to any joint arrangement with the College of Surgeons, have determined to avail themselves of an alleged power to grant a double licence in Medicine and Surgery; and they are now conferring such a licence, with the advantage of having it recognised by the Army and Navy and the Poor-law Boards. It is under such circumstances and such competition that the College of Surgeons wakens up and begins to talk about medical education like other people.

We learn that at a special meeting of the Council on Thursday, the 7th instant, various subjects were brought under consideration by a communication from the representative of the College in the General Medical Council; upon which the Council came to the following conclusions: That examinations in general education should be left to the national educational bodies recognised by the Medical Council; a proposal of the Medical Council for an enlarged curriculum of study was referred to the Court of Examiners; the Council agreed as to the desirability of a joint examination for a diploma or licence to practise in Medicine, Surgery, and Midwifery, throughout her Majesty's dominions; also that attendance upon lectures on Forensic Medicine should be required; and that in any amended Bill recommended by the Medical Council to Parliament, it is desirable that requisite permissive clauses for registering a qualification in State Medicine be inserted.

Better late than never. When the Council of the College of Surgeons is agreed as to the desirability of a single examination for a diploma in all the great branches of medical art, the attainment of a one-faculty system, for which we have argued for years, may be considered accomplished. True, it was not in the power of the College any longer to defer this great desideratum—a complete diploma after a complete examination. It now perceives the necessity, just when it is in danger of being superseded by other bodies who have not so blindly resisted adaptation to the wants of the time.

THE case against the General Medical Council may now be said to be complete. Dr. ANDREW WOOD has been writing a defence of the Council in the *Edinburgh Medical Journal*. And this defence constitutes the last and unnecessary argument in support of the view that the Medical Act of 1858 was a miserable compromise, and the General Medical Council which that Act created a very faulty instrument for accomplishing the ends contemplated in the Act itself.

Dr. ANDREW WOOD is not altogether unentitled to take up the cudgels in defence of the Council. Whether we regard the amount of good work which he has done in its committees, or the amount of what unfriendlier critics than we have called "talk" which he has contributed to its discussions, it must be allowed that Dr. ANDREW WOOD was entitled to say a word for a body which has so few admirers outside the circle of its own members. At the same time it is a weakness in Dr. WOOD's defence that it is written by one who is himself a member of the Council. It would say much more for this body if it could produce one outside critic who thinks it efficient and defensible. Up to this time such a person has not appeared.

We see nothing in Dr. WOOD's article which is calculated to reverse the universal judgment of the profession against the Medical Council. He does not seem to us to perceive the gist of the argument of those who condemn the Medical Council, and think the time ripe for the creation of a substitute for it. Not only so, but throughout the article he uses expressions of disparagement in speaking of the Council which are an admission of nearly all for which its opponents contend.

Let us hear what Dr. WOOD has to say in defence of a body in which he figures always conspicuously, and generally pleasantly, if somewhat eloquently. His description of the doings of the Council is not original. He might, with one exception, have gathered the enumeration of its feats from our own columns. Dr. WOOD, in his eulogy of the Council, says it has elected eminent presidents; it has prepared a Pharmacopœia which is acknowledged to be one of the very best, if not the very best, in existence; it has established an official Register, which, in the face of wonderful difficulties, it preserves pure and accurate. As to the presidents of the Council, their eminence and merits are not in the least under discussion, and are quite independent of the Council itself. As to the other merits of the Council, that of preparing a Pharmacopœia and constructing a Register, we think enough has been said. The Pharmacopœia first issued was extremely faulty and defective; and the present, though a very good one, does no more than properly represent the present state of pharmaceutical science. The Register is really not a feat that should be magnified: the preparation of it is little more than a clerical act.

But Dr. WOOD has greater praise than this for the

Council. It has not only done great things, but it is going to do greater things than these. It has issued through its committees two great Reports respectively on the subjects of State Medicine and Medical Education; and these Reports are only preliminary to great forthcoming Recommendations of the Council, which will doubtless have the most important effects of promoting the study of hygienic medicine, and of making medical education at once more methodical and practical. If the General Medical Council has not yet made the licensing bodies efficient and careful, it has greatly improved examinations, both preliminary and professional; so much so that the education of medical men generally throughout the country is very much better than it was prior to the creation of the Medical Council, and ignorant or incompetent practitioners are now only very rare exceptions proving a rule. In opposition to Sir JOHN GRAY, Dr. WOOD declares that practical and clinical tests have been extensively introduced into medical examinations; that they are all but universal in Scotland.

We may at once admit much that Dr. WOOD says, and yet object to the conclusion he would have us draw, that the Medical Council is one of the finest and most effective institutions in the country. We have never denied that medical men are better educated than ever they were before. But this does not alter the fact that students might be much better educated than they are, and that the Army and Navy Boards have found some men who have come fresh from the examining boards wofully ignorant and incompetent. Dr. WOOD says that clinical tests are common in Scotland; but he has to admit that in two of the principal examinations in England they are conspicuous by their absence—namely, in the examinations for the Apothecaries' licence and the diploma of the College of Surgeons. He says that if any essential recommendation of the Medical Council were disregarded by the examining bodies, a case would be made out for an appeal to the Privy Council. He will not deny that no recommendations of the Council are more essential than those touching the introduction of clinical tests into examinations, and yet he has to admit that these are disregarded by the two bodies which qualify the majority of English practitioners, and that no representation of this omission has ever been made to the Privy Council.

The question is not whether the Medical Council has done anything, but, has it done what it should have done? Does it act independently in the interest of the public and the profession? does it act promptly? is it constituted so as to be likely to act authoritatively? and, finally and very particularly, is there anything in what it does to reconcile the profession to paying five thousand a year for its continuance? The Medical Council may have a little moral influence. But is it worth while for the profession to pay five thousand a year to produce changes in medical education and examinations which everybody sees to be necessary, and to do this in the way of "moral suasion," only that the feelings and the comforts of old corporations may be respected?

We see nothing in Dr. WOOD's paper to lead us to give an affirmative answer to these questions. And when we supplement this consideration with Dr. WOOD's own admissions—"that the Medical Council is extremely limited in its powers"—"that the combination of examinations is very imperfectly provided for in the Medical Act"; when we reflect on some of Dr. WOOD's expressions, so nearly admitting the truth of our charges, such as "the present compromising Act"—"an insufficient compromise like the Medical Act"—"the clause (40th, for the prosecution of false pretenders) has been drawn up in such a bungling way that in cases of offences against it before the tribunals of justice there has been more frequently miscarriage than otherwise";—when we consider these admissions and expressions, in connexion with the weak, slow, and costly action of the Medical Council, we think that body may say, "Save me from my friends," and reconcile itself to being soon superseded.

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WE are happy to be relieved from an obligation, under a sense of which we have hitherto refrained from discussing a subject of no small interest to us as medical journalists. The appointment of a Royal Commission to inquire into the nature and operation of the sanitary laws, including also within its scope the constitution of the central and local authorities charged with the administration of such laws, seemed to render it desirable that we should suspend any discussion of the various matters referred to the Commission until we were in a position to know what views are entertained by those gentlemen whose official experience would point them out as chief witnesses on such an occasion. We have understood that the evidence already taken is now in the press, and in that case it will, no doubt, soon be available for public use. Meantime the Medical Officer of the Privy Council has taken the opportunity afforded by the publication of his Eleventh Annual Report to make known what, in his judgment, is necessary to be done in order to reduce our chaotic sanitary legislation and administration into an effective working condition.

Passing by for the present the consideration of Mr. SIMON's views relating to the *local* administration of sanitary law, it is of his proposals in reference to the *central* authority that we propose now to speak. The fact that the Privy Council, the Home Office, the Local Government Act Office, the Board of Trade, and the Registrar-General's Office, are all mixed up in this question of Public Health, is abundantly sufficient to prove that our sanitary machinery cannot possibly work satisfactorily in its present form. Mr. SIMON states that his own department was constituted under the Public Health Act (1858), to exercise "the essentially sanitary functions of Government;" and his enumeration of those functions only makes it the more inexplicable why the Privy Council should not at the same time have had transferred to it the powers over the metropolitan Water Companies which have continued to be vested in the Board of Trade, and, furthermore, why the same duality of supervision should have been preserved and extended as between the Privy Council and the Home Secretary. But the facts being so, how are we to deal with them in such wise as to secure a maximum of advantage to the health interests of the nation? The Medical Department of the Privy Council has, we are told, "an important point of contact with each of two non-medical offices"—viz., the

Local Government Act Office and the Registrar-General's Office. The former of these is the medium through which the Home Secretary controls the exercise of the rating and borrowing powers under the Local Government Act, and the various proposals of local authorities for drainage, sewage, utilisation, &c. The Registrar-General's Office supplies the statistical information with which we have for thirty years been familiar, and some of which "constitutes an indispensable basis for proceedings in the Medical Department." These three Departments are under the control of two Cabinet Ministers, the Lord President of the Council and the Home Secretary; and Mr. SIMON, it seems, is of opinion that the question whether this divided authority should continue, or a single authority be substituted for it, involves "many other considerations than those on which it is his province to enter." As we, however, do not feel under any restriction in this regard, we have no hesitation at all in pronouncing for the single authority. But we do not desire to see either of the Ministers of State, who now have their hands quite full enough of political work at the Council and Home Offices, charged with the strictly non-political responsibilities of sanitary administration. What we want, and what will alone offer a satisfactory solution of present difficulties, is the creation of a new department in the State. We ask for a Minister of Public Health; and our view is that the medical, engineering, and statistical departments should be subordinated to that Minister, their respective heads forming, as it were, his Council of Health, and acting harmoniously with each other to that end.

We take it that the Department of Vital Statistics—meaning that branch of the Registrar-General's Office which, under the able direction of Dr. WM. FARR, has so long rendered invaluable service to sanitary science—must be regarded as the initial element in this scheme: to it we should look for the prompt and precise information about the prevalence and fatality of disease all over the country which would enable Mr. SIMON'S Department of Medical Inspection and Control to set about its investigations; and finally to the Engineering Department we should come last of all for the general supervision which will always be necessary to keep local authorities up to the mark in respect of constructive works, &c.

It is hardly necessary to say that, under such an arrangement, we should look for a considerable accession to the working power, or, at any rate, to the results of the working power, now exhibited by each of the three departments we have named. We agree entirely with Mr. SIMON when he says that, admirable as is the detailed statement relative to the deaths in London which the Registrar-General publishes every week, something more than that is necessary to the efficient working of a Sanitary Code. The Quarterly Return of Deaths is also useful as far it goes; but that is not nearly far enough, inasmuch as it gives merely the number of deaths registered in the registration *districts* without distinction of causes. We are aware that information is given as to the prevalence of disease in their *sub-districts* by a few registrars; but it is of too fragmentary a character to be of much real value for sanitary purposes. The Registrar-General's *pièce de résistance*—his Annual Report—is mostly a year and a half in arrear, and it is thus deprived of any interest beyond that which attaches to it as a work of reference. The requirements which an efficient sanitary organisation would make upon the Statistical Department of the Registrar-General's Office are, in our judgment, the publication, firstly, of a weekly return of the mortality in London and a selected number of the largest towns; secondly, of a quarterly return of the deaths from certain selected causes in every sub-district; thirdly, an annual summary of the weekly and quarterly returns; and, fourthly, a triennial or quinquennial report in substitution for the present annual reports. The same Department should collect, classify, and publish—*weekly* for London and the large towns, *quarterly* for the country generally—returns of cases of sickness arising within the practice of the Poor-law medical officers and of the medical officers of all public institutions. It would be an absurdity to have a machinery for the collection, classification, and publication of the sickness returns distinct and separate from that which has for a third of a century been in use for the returns of death.

The Department of Medical Inspection and Control would continue to be, as now, confined to strictly medico-sanitary duties. The utmost possible freedom of intercourse, for reference and consultation, would be essential to be maintained between it and the Statistical Department; but the management of the two should be kept, as now, strictly independent of each other, the two chiefs meeting on equal terms at the council-table of the Minister. We apprehend that an addition must needs be made to the staff of the Medical Officer to meet the requirements of increased supervision; and it is a question whether the better plan would not be at once to parcel the country out into divisions, each with its resident medical inspector, who might (amongst other things) be required to take cognisance generally of the way in which the causes of sickness and death are returned by medical men to the registrars.

The Engineering Department would also act under the Minister of Public Health, much as it does at present under the Home Secretary; any legal functions which are now mixed up with its duties being transferred to a specially appointed official, who should act as legal adviser to the Minister.

With a central authority constituted after the manner we have thus roughly sketched out, with the country properly mapped out into convenient health-areas (regard being had in this particular to the points referred to by us last week*), and with an efficient staff for registration, and for medico-sanitary, constructive, and legal requirements, there would be reason to hope for such an improvement in the general sanitary condition of the population of this country as it should be one of the highest aims of statesmanship to realise.

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A LETTER from Dr. L. ROBERTSON, which appeared in our columns on the 18th ult., directs attention to a question regarding the disposal of the chronic insane that deserves a fuller and more practical consideration than it has yet received. Dr. ROBERTSON obtained as many as eighty-nine applications in answer to an advertisement offering £170 a

* The Death-rates of Towns.

year for the board, lodging, and medical treatment of a lady of unsound mind. Considering how little desirable an inmate of a family a person of unsound mind commonly is, and how entirely subversive of all domestic comfort the presence of such a person may be, there was certainly some reason to be surprised at so many applications on such terms. Everyone, however, who looks at the question of the disposal of the insane without prejudice, and without the bias of special interests, must admit that if an insane person can have in a private house the care and control necessary for his own wellbeing and the safety of others, there is no just reason for sending him to an asylum. He is entitled to the utmost freedom that is compatible with his proper care, and to all the comforts which his resources will admit of. The important question to be resolved is really—How many and what class of patients are fitted for family treatment? The public is apt to think that no insane person who is not dangerous to himself or to others should be sent to an asylum; but a very little consideration proves this notion to be quite untenable. The habits of many of the insane, and the particular delusions of others, render them unfit inmates of private houses. The experiments which the Scotch Lunacy Commissioners have made, of placing chronic insane patients in private dwellings, have furnished some useful information with regard to the sort of insanity in which private treatment may be adopted successfully; and, although the proportion of cases which are so placed at present in Scotland is not very great, the results warrant the belief that the experiments might be extended with advantage. Dr. ROBERTSON might do some service of a practical kind if he would go carefully through the 700 or 800 patients who are in the Sussex Asylum, and declare how many of them he could conscientiously recommend to be placed in private dwellings on the condition of suitable pecuniary provision being made for their care. Insanity is the same disease in the private patient and in the pauper, and the elements for a scientific conclusion are, therefore, the same in both cases. Before, however, the insane can be placed in any numbers in ordinary dwellings, it is plainly most necessary that there should be a guarantee of their proper treatment in them; and there can be no effectual guarantee short of as frequent visitations by the Commissioners in Lunacy as are thought necessary to private asylums. Under the present system the supervision of patients in ordinary dwellings is certainly insufficient. While the private asylums within the metropolitan district are visited and carefully inspected not less than six times a year, the insane in private houses are only seen officially, on an average, once a year. This is only a little better than being exempt from visitation. What is wanted now, and what is essential before the family treatment of insanity can be much extended, is more frequent visitation and more effectual supervision by the Commissioners; full power being conferred on them to order the removal to an asylum or elsewhere of any patient whom they believe to be improperly treated, or to be unfitted, by the character of his disease, for care and treatment in the particular house in which he is placed. For much too long the treatment of insanity has been considered an entirely special mystery, and kept apart from the rest of medicine in a mischievous isolation. Both medical science and the medical profession have suffered in consequence. But the time has now come when a great change must inevitably take place, and mental diseases take their proper position by the side of other diseases of the nervous system.

# Medical Annotations.

"Ne quid nimis."

## WHO PROPOUNDED THE DOCTRINE OF THE VASO-MOTOR NERVES?

IN the able introductory lecture of Dr. George Johnson, published in THE LANCET of October 3rd, we read that "Bernard and others demonstrated that the contraction of arteries is under the influence of certain nerves called vaso-motor." This statement as it stands is calculated to create an erroneous impression. Not only was Bernard not the first experimenter who gave that demonstration, but after others had given it and propounded the now universally received theory of the vaso-motor nerves, he refused to accept it, and persisted for several years in denying absolutely that the effects of the division of the cervical sympathetic nerve were due to a paralysis of blood-vessels. To him belongs the merit of having found these effects, but he considered them as resulting, not from a paralysis, but from some special action of the divided nerve. This discovery only acquired its great importance after Dr. Brown-Séquard had established the other decisive fact, that galvanisation of the cervical sympathetic produces contraction of bloodvessels and other effects just the reverse of those of the division of that nerve. Led by these facts, the last-named experimenter proposed the vaso-motor theory now generally admitted. The paper containing his views first appeared in August, 1852, in the *Medical Examiner* of Philadelphia, U.S., and was soon afterwards reprinted in the *Edinburgh Monthly Journal of the Medical Sciences*. More than two months later, in October of that year (1852), Professor Bernard communicated to the Paris Biological Society his first researches on the effects of galvanisation of the cervical sympathetic nerve. So little was he inclined to the view that that nerve can act on the muscular fibres of blood-vessels, that in this communication (*Gazette Médicale de Paris*, 1852, p. 775) he does not even mention the influence of galvanisation of that nerve on circulation and the temperature of the face, eye, and ear. In a second communication to the same Society (in November, 1852), he states that circulation is weakened by that galvanisation, and refers to further publications for a more complete account of his researches. Early in 1853, Dr. Augustus Waller, not knowing the facts and views already published by Dr. Brown-Séquard, performed experiments at University College which led him to similar views. On Feb. 28th of the same year, he sent a paper to the Paris Academy of Sciences giving the results and conclusions of his researches. A year later, Professor Bernard published a long memoir (*Gazette Médicale de Paris*, 1854, p. 20) on that subject, and maintained, against Dr. Brown-Séquard and others, that the condition of circulation after the division of the cervical sympathetic results from an action of the divided nerve, and not from the paralysis of the muscular fibres of bloodvessels. While this paper was in course of publication, two papers were read at the Academy of Sciences by Dr. Brown-Séquard, in which he adduced many facts demonstrating fully that a paralysis of bloodvessels is the real cause of the phenomena observed in the face and ear after the division of the cer

vical sympathetic nerve, and that a contraction of the same muscular fibres is the cause of the phenomena following the irritation of that nerve.

This short historical sketch shows sufficiently, not only that Bernard did not discover the principal fact proving the vaso-motor power of certain nerves, but that it would be quite wrong to attribute to him the merit of having first demonstrated the theory of the vaso-motor nerves, as he refused to admit it after it had been proposed by Dr. Brown-Séquard.

## THE QUEEN'S FARM LUNATIC ASYLUM, JERSEY.

We have received the copy of a judicial report, drawn up by the Attorney-General and Coroner for the island of Jersey, on the treatment of the late Mr. Browning, and the general administration of the Queen's Farm Lunatic Asylum. The Coroner states that he does not feel it necessary to make any remarks as to the propriety of Mr. Browning's having been placed in the asylum, beyond observing that his confinement was in accordance with the advice of two independent medical men. With regard to the use of unnecessary restraint, he is of opinion that the degree of censure conveyed at the inquest is not justified by the facts. He points out that the cell in which the patient was confined, although bare, and without any furniture except a bed, was clean and well ventilated; and thinks that the two medical men who visited the patient, and complained of the restraint used, were hardly in a position to judge of the treatment which the condition of the sufferer may have rendered necessary, the more so as they did not raise him up, and observe that his hands were tied behind him with one of his own stockings. Whether such a mode of confinement is preferable to a strait waistcoat, or manual force, the Coroner is not in a position to determine, as the medical witnesses differed in opinion on the point. He deems it to be a matter of regret that at the time of Mr. Browning's death, and for some days before, there was no medical officer in the establishment, and he considers it advisable that for the future arrangements should be made to secure the residence of a properly qualified medical practitioner. Thus, according to the report, no one is to blame, and all concerned desire to make the asylum perfect, and conducive to the objects of the institution—the relief of suffering humanity.

We think, however, enough has been brought to light to make it desirable that the asylum should be officially inspected by the Lunacy Commissioners, and we learn with extreme regret that their jurisdiction does not extend to the Channel Islands, and that such an inquiry cannot on that account be made. The public justly regard inspection by the Commissioners as one of the main safeguards against cruelty and abuse; and it seems an unfortunate mistake in legislation to have omitted from their jurisdiction an out-of-the-way island where their services are very apparently required.

## EXPERIMENTS ON THE PANCREATIC JUICE.

In the Academy of Sciences of Paris M. Chauvin and M. Morat have recently read a paper "On the Pancreatic Juice," and the conclusions at which they have arrived are—first, that the general results of their experiments on artificial digestion with this fluid agree with those made by older experimenters, from Eberle to Claude Bernard. Secondly, that in such experiments with artificial digestion the action of the pancreatic juice is not checked by the presence of gastric juice, nor by hydrochloric acid considerably diluted with water. Thirdly, that at ordinary temperatures, and in inert vessels, the juice does not act so energetically as when maintained at the temperature of the body, and under the influence of the movements of the digestive fluid. Fourthly, in the digestion that ordinarily takes place in the stomach—and this is a capital point—the pancreatic juice preserves its energies intact, notwithstanding the presence of the gastric juice, and may initiate in the interior of the stomach a complete digestion of the three species of alimentary substances. And, lastly, they state that in a clinical point of view they have obtained remarkable results with the aid of pancreatic juice and extract.

## THE CHAIR OF SURGERY AT GLASGOW.

We have much pleasure in announcing that Dr. George Macleod has obtained the Chair of Surgery in the University of Glasgow, recently vacated by Mr. Lister. This appointment will be hailed with satisfaction by the great body of the profession in Glasgow and elsewhere. Dr. Macleod enjoys a good reputation as a practical surgeon, and his different publications on professional subjects are an evidence of his scientific qualifications. In stating that, in our opinion, the best selection has been made, we do not desire to disparage the claims of other men. Among Professor Macleod's competitors, for example, we consider that Dr. George Buchanan's professional merits quite justified his candidature for the vacant chair. He is an accomplished anatomist, and has the reputation of being a skilful operator.

## HEALTH OF BRIGHTON.

A Report on the Return of Births and Deaths in Brighton during the quarter ending June last has just been laid before the Town Council. There were 685 births and 413 deaths. Compared with the corresponding quarter of 1868, there were 34 more births and 2 less deaths. The birth-rate varies in different parts of the town from 21·9 to 37 per 1000—a proof that the population of the inferior and crowded localities assimilates in character to that of London and other large towns, whilst that of the more fashionable districts is less prolific. It is on this account impossible to compare Brighton with industrial towns. Of the 413 deaths, 39 were referred to zymotic diseases, 11 to fatal forms of fever, 5 to whooping-cough, and 4 each to scarlatina, diphtheria, and diarrhœa. There were fatal cases of typhoid fever in Lavender-street, Kemp-town, and in Ashton-street, Elm-grove, and Johnstone-court. The reporter wisely recommends that the prevalence of fever should be watched, as the number of fatal cases represents but a small proportion of the attacks. It would be interesting to know how far the fever depends upon the absence of proper drainage, or the existence of overflowing cesspools. In giving an impartial statement of facts, the reporter does not venture to speculate on what the death-rate of Brighton ought to be, but recommends all who have the welfare of the town really at heart to assist in carrying out such measures as may tend still further to raise the standard of health in the town.

## ON THE TIME REQUIRED TO DISCRIMINATE COLOUR.

In the last number of Pflüger's *Archives of Physiology*, MM. Burckhardt and Faber describe an apparatus consisting of a pendulum of wood with a movable leaden weight attached, which has a slit at its lower end. Whilst this slit vibrates behind a second narrow fissure, a momentary transmission of light occurs, the duration of which can be varied by raising or lowering the weight of the pendulum, or by increasing or diminishing the width of the slit. The source of light consisted of a milk-white glass plate illumi-

nated by a petroleum lamp, and coloured glasses of various tints were introduced into the slit of the pendulum. The intensity of the light was regulated and modified by the withdrawal of the lamp from the white plate, or by the interposition of smoked glasses; and in each experiment the observer was required to state what colour shot across the slit. In the first series of experiments the intensity of illumination required, when permanent, to enable the observer to state with accuracy the colour perceived, was investigated; as well as the degree at which all perception of colour ceased. In both series, bright-yellow occupied the first position; red and violet the last. It was also observed that, with transient illumination, bright-yellow gave the most distinct sensation with the smallest amount of light and the shortest duration. After this colour, there followed, with Burckhardt, yellow, bright-blue, blue, green, grass-green, violet, red; and with Faber, yellow, blue, green, grass-green, clear blue, red, violet. Experiments were then made to determine the intensity of light requisite for the accurate perception of colour the duration of which was only ·0029 of a second, together with that required when the impression was persistent. They found the relation for all colours nearly equal in the same individual, though widely different for the two observers, the proportion being with Burckhardt as 173 to 1, and with Faber as 513 to 1. They conclude thence that the various colours must have the same or nearly the same brightness, in order, with a minimum duration, to yield a minimum sensation of colour. The experiment with more protracted duration of the impression showed that the intensity of the excitation necessary to produce the least possible sensation of colour does not diminish proportionately with the increase of the duration of the stimulus.

## MR. GOSCHEN AT THE BIRMINGHAM WORKHOUSE.

WE are glad to learn that the President of the Poor-law Board, following the example of some of his colleagues in their departments, is determined to make himself acquainted with the practical working of the Poor Law by personal observation. Last week Mr. Goschen visited the Birmingham Workhouse, accompanied by Mr. Peel, the Poor-law inspector; and although the immediate object of the visit was the inspection of the epileptic wards, the President visited the sick wards, and went over the whole house. The news of the arrival of so unexpected a visitor brought up several of the guardians to the workhouse, to whom and to the medical officer Mr. Goschen put "no end of questions." His visit lasted some hours, and we are informed was very satisfactory. We trust that many similar inspections will take place, for we are confident that the head of the Poor-law Board will find the process infinitely more instructive than listening to the letters of guardians and the reports of inspectors.

## NEW MODE OF ADMINISTERING NITROUS OXIDE.

SOME interesting improvements in the mode of administering nitrous oxide gas have recently been perfected by Mr. Coleman, at the Dental Hospital of London. On Thursday, the 7th inst., this gentleman anæsthetised upon a new plan eight patients in the hospital, for the removal of teeth. All who have had much experience in the use of the protoxide of nitrogen have found that any admixture of air with the gas greatly impairs its efficacy. The insensibility is less rapidly and less perfectly produced under these circumstances, whilst the patient is invariably more excited during, and more prostrated after, the inhalation of the gas. In order therefore to secure the entrance into the blood, through the lungs, of pure nitrous oxide without accompanying air, Mr. Coleman so arranges his apparatus that he first dilutes with nitrogen the oxygen of the residual air of the lungs, and then permits the patient to breathe pure nitrous oxide. By this method the patients become more speedily unconscious, and the anæsthesia lasts longer, at the same time that they appear throughout the administration calmer than is usually the case under the ordinary mode of administration. It is a noteworthy fact, also, that in none of the eight cases was there the least appearance of lividity. During the inhalation of the nitrogen, the pulse was noticed to fall steadily, but upon supplying the nitrous oxide it soon regained its force and frequency. Mr. Coleman stated to those who witnessed the inhalation, that he believed that hydrogen would be more successful than nitrogen; but as the inhalation of that gas often produces disagreeable sensations, he preferred trying the effects of nitrogen before employing hydrogen. If by this new method of administration it shall be found that the anæsthesia produced by nitrous oxide can be rendered more lasting, say for a period of even only ten or fifteen seconds, it will be a great boon to the dentists, who oftentimes have most uncomfortably to expedite their operations with it. As regards cost, the above plan would be found the most economical of any yet devised.

## THE BIRMINGHAM MEDICAL SCHOOL.

THE winter session of the Queen's College has not been opened by an introductory address this year, and the Council have determined to put off the distribution of the prizes till December, when they will most probably be distributed by the president of the College, the Earl of Lichfield. At the General Hospital the clinical work is not usually opened by any formal address; but the Queen's Hospital has recently adopted the custom of an opening lecture, which was this year delivered by Mr. Sampson Gamgee. After the address, the following prizes were distributed by the chairman, Dr. Fleming: — Senior Clinical Medicine: 1, Mr. E. B. Wood; 2, Mr. E. G. Smith. Junior Clinical Medicine: 1, Mr. Joseph Hunt; 2, No award. Senior Surgery: 1, Mr. E. G. Smith; 2, Mr. E. H. Ravenhill. Junior Surgery: 1, Mr. J. Priestley Smith; 2, Mr. J. Hunt. Midwifery: Rev. T. H. Lambert.

## THE MAURITIUS.

WE have received some papers and communications from our correspondent at the Mauritius extending to the 24th of August last. According to the quarterly report of the Health Officer, Dr. Edwards, it appears that the total number of deaths from fever registered during the quarter ending the 30th of June last, was 2485. In the town of Port Louis the disease was not confined to any particular locality. Of the rural districts, Flacq was the most unhealthy, the mortality having risen from 622 in the previous quarter to 874. Fever was also prevalent in the lower parts of Savanne and Plaines Wilhems. Dysentery, the sequel of fever or of malarious origin, caused 439 deaths during the same period. The report by the Health Officer is contradictory of that furnished by Dr. Reid, the principal medical officer for the same period. The men of the 86th Regiment were exhibiting the effects of their continued exposure to malaria; attacks of intermittent fever being very common among them. When two of the companies went to musketry, they broke down in a great measure, so that half of their number were admitted to hospital, not as regular patients however, but as casuals. There prevails an idea that the local military authorities do not desire to have the whole truth known. If the fever is not dying out, at any rate the inhabitants appear to be.

It was the commencement of the cool season at the time of our correspondent's writing, and fever was still prevailing. It appears to us absurd to keep any troops in the Mauritius. The number of those now present is too small to be of any good; but every individual soldier is introducing into his system a cause of future ill-health.

## ST. BARTHOLOMEW'S HOSPITAL.

OWING to a variety of *contretemps*, our Report on the Out-patient Department of St. Bartholomew's Hospital is deferred until next week. The fruits of the recent agitation are, however, already apparent. The result of the deliberations of the House Committee and Medical Council, announced with so much solemnity by Mr. Paget at the Old Students' Dinner, on October 1st, was promulgated on Wednesday. The remedy for all the abuses of the Out-patient Department, at which the combined wisdom of the institution has arrived, is the following:—The doors will be shut at 10 instead of 11 A.M., and three officials have been appointed to sort the patients at the doors. Two of these, who are registrars, are to stand inside, and distribute the patients to the house physicians and surgeons, and the assistant physicians and surgeons respectively, according to their judgment. After the doors have been shut, the third official, the Curator of the Surgical Instruments, is to face the clamouring crowd outside, and select such patients as he considers to require treatment. Truly, if this is all that has been produced by many months of deliberation, the time for substituting a new governing power for that which at present rules at St. Bartholomew's has fully come.

## DR. HESLOP'S PAMPHLET.

A DISCUSSION, more lively perhaps than elegant, arose the other day in the Birmingham Board of Guardians on an application of the parish medical officers of the union for a mark of approval from the Board in refutation of the description given in Dr. Heslop's pamphlet on Poor-law Medical Officers. One guardian said that Dr. Heslop was such a master of vituperation that no member of the Board was so little of a gentleman as to be a match for him in that respect. The application of the officers had been referred to the Out-door Medical Relief Committee, who reported that they did not consider it desirable to take any action upon this application. The Board, however, thought differently, and passed a resolution expressing full satisfaction with the zeal and ability of their medical officers. We have expressed our opinion of Dr. Heslop's statements on this subject, and need not here repeat it; but though we believe them to be indiscriminate and unjust to a large number of officers whose worth and devotion to their duty are not to be measured by their salaries, it is vain for the guardians to expect much public confidence in services for which they pay so meanly. These services can only be raised in the estimation of the public and of the poor by being properly remunerated.

## ARTISANS' DWELLINGS.

IT is a hopeful sign to observe the increased appreciation of Mr. Torrens's Act by the various metropolitan vestries. We have noticed its successful application in Poplar and Mile-end and Holborn, and it is now to be put in action in Clerkenwell and Marylebone. In the latter parish it is odd to see the action of the vestry opposed by the agent of Lord Portman, whose interest might have been supposed to be in favour of decency and health. Less surprising is it to observe that in Clerkenwell there are to be found persons ignorant enough to be frightened by a solicitor, who said that the vestry had no more right to pull down houses than he had to pull down the vestry hall. And yet it was stated that the court complained of, called Frying-pan Alley, was the birthplace of everything that was bad. It was dirty, obscured, and miserable; it was unfit for the housing of dumb animals; there was no light, no ventilation; it was a place calculated to generate fever and disease. Let us encourage the vestries to be bold. It was to destroy such wretchedness that the Act was passed, and we think that neither lords nor bullies will be permitted to obstruct its course.

## PATHOLOGICAL SOCIETY.

THE first meeting of the present session, we remind members, will take place on Tuesday next. We may take the opportunity of suggesting that communications should be made more truly pathological, and that unnecessary clinical details should be avoided. In fact, it might be well for contributors to give first a description of exhibited specimens, and then add only so many clinical particulars as may be needed to throw light on the causes or effects of morbid processes. The fashion is to follow the reverse order, and speakers often exhaust the patience of their hearers with the clinical history before scarcely a word is said about the specimen itself, the description of which is even then too briefly given. We hope that the disposition to freer discussion exhibited last session will be encouraged.

## THE SIGNING OF SCHEDULES.

WE are given to understand that the Dean of the London Hospital Medical School has obtained permission to sign the schedules of students in place of the professors. The College made the concession some time since; but we do not know that, as regards the Hall, any other school has obtained the permission granted to Mr. Rivington. As the plan referred to is a great convenience, and saves an immense deal of trouble, it is desirable that the schools generally should secure its benefits, and we notice the matter in order that their attention may be directed at once thereto in the interest both of the students and the professors.

## HYDRATE OF CHLORAL.

DR. J. W. OGLE has been giving a trial to this new remedy in several cases. It has proved most useful and satisfactory in its action as a hypnotic in small doses—viz., doses varying from five to ten grains. In a slight attack of delirium tremens, twenty grains acted very sufficiently and well in procuring sleep. In one case only did any unpleasantness attend its administration, and that was when peculiar sensations about the head were complained of by a woman suffering from chronic peritonitis, who took five grains. On the following night four grains were given along with a few drops of chloric ether, and no such unpleasant results followed.

## COMPULSORY VACCINATION.

THE guardians of Luton have determined to disregard the Compulsory Vaccination Act. Three guardians voted in favour of the Act being enforced, whilst eight voted for prosecutions being delayed. It is due to the guardians to say that some of those who voted against the enforcement of the Act did so on the ground that it was calculated to promote opposition to vaccination itself. The action of the guardians is very responsible. If the Compulsory Vaccination Act is a bad one, it should be repealed. Meantime it should be enforced, and guardians should not use their discretion as to the application of so serious an Act of Parliament. For ourselves, we see nothing but pecuniary

gain to the medical profession, and loss of health and wealth to the public, by relaxing the Compulsory Vaccination Act; but if the public prefers small-pox and large doctors' bills to gratuitous vaccination, that is their look-out. But even in this case, the Legislature, and not the boards of guardians, should sanction the relaxation.

## THE NAVY BLUE-BOOK.

THE Statistical Report on the Health of the Navy, for the year 1867, has just been delivered as a parliamentary paper. As Dr. Mackay's Statistical Abstract gave us, in February last, an account of the health of the navy down to a more recent period than the Report before us refers to, we need not now trouble our readers with any statistics; but the Appendix, containing some interesting papers by various medical officers, we shall notice on an early occasion.

## PAUPER NURSING.

THE attention of the guardians of Islington has at length been drawn to the anomalies of the system of out-door pauper nursing, which have been practised for some years past. A poor bed-ridden woman, who was receiving three shillings a week from the parish, required a nurse, and one was sent her from the workhouse, who claimed to be paid for her services, as otherwise she would prefer to stay where she could sit in a comfortable room, and employ her time in light reading and needle-work. The clerk said they could not compel paupers to go out nursing unless they thought proper, and they would naturally expect payment. The whole system is rotten. The pauper nurses sent out under such circumstances are little better than paupers who rob the sick of money and food, without giving any assistance in return. Nothing is more imperatively required than a small staff of nurses, who might follow the parish doctor, and see that his directions are properly observed. Besides directly saving a large amount of suffering and expense, such nurses would diffuse a knowledge of the principles of nursing amongst the extreme poor, which would often enable them to dispense with much assistance in future illnesses.

## POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

THE quarterly meeting of this Association will be held at the Freemasons' Tavern, Great Queen-street, Lincoln's-inn-fields, on Wednesday, the 27th inst., at 7.30 P.M. precisely. We hear that further important illustrations of the benefits secured to Ireland by the Poor-law Dispensary system will be given on this occasion. The President has lately made a tour in Ireland, and personally inspected the working of the system; and it would appear that the difference between the state of things prevailing in the two countries is perfectly startling. We shall not anticipate the detailed statements to be made at the meeting; but we must say that this question of the possibility of beneficially modifying English poor relief by following more or less closely the Irish model, is fast assuming a high national importance. We could heartily wish that the more enlightened of our Poor-law guardians in London, casting aside their prejudices against the agitation of Poor-law medical officers, would attend the meeting of the Association; for the remarkable economic advantages, which become more and more apparent on inquiry, ought to recommend the Irish system even more strongly to the ratepayers than to the medical profession. The most prejudiced persons could hardly fail to trace, in the facts now being brought out, the direct and constant relation between intelligent and liberal arrangements for the treatment of the sick poor and reduction of the general expenses on account of pauperism.

## THE MEDICAL CLUB.

THE annual general meeting of the members of this Club was held at the Club-house on Wednesday last, Sir William Fergusson, Bart., in the chair. The attendance was large, notice having been given that a resolution to alter the constitution of the Club would be proposed. After a lengthy and animated discussion, an amendment was carried by an overwhelming majority affirming that the Club should "be continued to be conducted on the proprietary principle, the same as heretofore, in accordance with the agreement now existing between the Honorary Secretary and the Club."

The following gentlemen were elected a Committee for the ensuing year:—Mr. J. Brady, M.P.; Mr. Clement, M.P.; Mr. Cockayne; Sir W. Fergusson, Bart.; Dr. Bell Fletcher; Dr. P. Hood; Sir J. Galbraith Logan, K.C.B.; Dr. J. A. Lush, M.P.; Sir Ranald Martin, C.B.; Dr. McEwen; Sir C. R. McGrigor, Bart.; Dr. Russell Reynolds; Dr. B. W. Richardson; Mr. Edwin Saunders; Dr. Swettenham; Dr. Webster; Dr. Wiblin; and Mr. Erasmus Wilson.

Owing to the meeting, the usual monthly dinner was, we understand, postponed until the 4th November, when Sir W. Fergusson will preside.

## EDINBURGH MATTERS.

IN the Royal Infirmary, Mr. Annandale has been appointed one of the surgeons in the room of Professor Spence, whose period of office has expired. But we are glad to learn that Mr. Spence, as the Professor of Systematic Surgery, has had twenty-eight beds allotted to him. This is an arrangement which we advocated some time ago, and the propriety of it is obvious. Dr. Joseph Bell has been appointed assistant-surgeon to the Infirmary, and will have charge of the Convalescent Hospital. The managers have determined to appoint another assistant-surgeon. The candidates are Dr. John Duncan, Dr. A. G. Miller, and Dr. John Chiene. The appointment of Dr. Sanders to the chair of Pathology creates a vacancy in the office of Conservator of the Museum of the College of Surgeons. Dr. Grainger Stewart resigns the situation of Pathologist to the Infirmary, and is not unlikely to be elected one of its physicians.

TWENTY-THREE cases of scurvy have been admitted into the *Dreadnought* Hospital Ship during the past nine months, as compared with forty-two cases in the corresponding period of last year, and seventy-one cases in that of 1867. The *Dreadnought* has for many years received more patients affected with this disease than all the other hospitals of the United Kingdom; and the above statistics indicate a remarkable and progressive diminution of scurvy since the Duke of Richmond's Act relating to the health and accommodation of seamen came into operation.

THE Executive Committee of the General Medical Council will meet on the 26th instant. Amongst other matters that will engage the attention of the Council will be that of resuming negotiations with the Government with a view to the amendment of the Medical Act. Doubtless both the Government and the Council will feel that this question will have to be considered in a thorough manner if it is to be settled to the satisfaction of the profession.

THE medical profession in Birmingham and the adjoining counties have been invited to hear an address by Dr. B. W. Richardson, to be delivered on Thursday, the 21st instant, at the special request of the President and Council of the Midland Medical Society. Coffee will be provided at seven, in the large public room of the Great Western Hotel in Birmingham, and we have the authority of the President, Mr.

S. A. Bindley, for saying that he will be very happy to see at the conversazione any member of the profession who may be desirous of attending.

THE Annual General Meeting of the London Union Society will be held at King's College on Wednesday next, at 7.30 P.M., to receive the Report of the Committee, and elect officers and committeemen for the ensuing session.

THE *Army and Navy Gazette* understands that France and the Netherlands (lion and lamb) have agreed to accept the yellow flag and red cross, proposed by Dr. Steinberg, as an international standard for hospitals, ambulances, &c., in war time. Dr. Steinberg deserves great credit for his exertions and philanthropy.

MR. ELLIS J. MORRIS, late medical officer to the Welwyn Union, has been presented with a purse containing £38, contributed by every class of the residents of Welwyn, Digswell, Ayott St. Peter, and Ayott St. Lawrence, as a token of the esteem and regard in which he is held by the inhabitants of that union, and as a mark of their appreciation of the ability and kindness with which he has discharged his duties as parish medical officer. The residents of Woolmer Green also presented a silver teapot, value £12.

WE may call our readers' attention to an excellent little publication which has just been started among the monthlies, entitled the *Animal World*. It is the journal of the Royal Society for the Prevention of Cruelty to Animals, and costs twopence. The humanity displayed by Eastern nations, particularly by the followers of Mahomet, towards animals ought to put Christians to shame. The object of this journal—kindness to animals—is most laudable, and it has our hearty sympathy.

THE late Dr. Mackesy, of Waterford, has bequeathed the sum of £100 towards the Royal Medical Benevolent Fund Society of Ireland.

FROM the last report of the medical officer of the Athlone Union, we find that fifty-three cases of typhus fever have been received into the union fever hospital during the last four months, besides a large number attended at their own homes. The medical officer considers that this large amount of human suffering has resulted from total neglect of the most obvious and ordinary sanitary precautions.

THE Board of Trinity College, Dublin, has elected Dr. Mahaffy, F.T.C.D., lecturer on Ancient History (a new professorship) in that institution.

THE "Ship Captain's Medical Guide," published under the authority of the Board of Trade, in compliance with the provisions of the Merchant Shipping Act of 1867, is now used by the Coast Guard and on the Trinity light-ships, as well as in the Mercantile Marine.

Dr. MONTON'S Report on the health of Guildford for the nine months ending Sept. 30th, states that the town has been remarkably free from enteric fever and other infectious diseases, and that the general health has been "very good." The annual death-rate in the nine months was 15 per 1000.

IT appears from a report of Dr. Stevenson, the medical officer of health for the parish of St. Pancras, that 44 per cent. of the cowsheds in that extensive parish have been visited by the foot-and-mouth disease, and the same percentage of animals in the sheds have had the disease, two only having been slaughtered. Immunity from the plague seems to have been enjoyed by cows grazing in the fields.

# The Lancet Investigation
INTO THE
# ADMINISTRATION OF THE OUT-PATIENT DEPARTMENT OF THE LONDON HOSPITALS.

No. I.

## THE HOSPITAL FOR SICK CHILDREN, GREAT ORMOND STREET.

THE out-patient department of this hospital has evidently increased far beyond the expectation of the Managing Committee, and the accommodation provided is acknowledged to be totally insufficient for carrying out the work. The number of applicants last year was 15,143—a larger total than has ever been known before in a similar period. Until very recently, admission has been entirely free; but so much pressure has of late been made upon the department, and the staff have experienced so much difficulty in carrying out the work, that new letters have been issued, on which it is stated that "no patient will henceforth be prescribed for a *second* time unless on the production of a subscriber's letter, or of a certificate from a doctor, minister of religion, Scripture reader, or city missionary, that the bearer is too poor to pay for medical attendance, and is a proper object of charity."

The number of new patients is about 300 per week, and the average weekly attendance is about 1500. The latter varies from 1200 to 1800. These attendances are not equally distributed, as may be seen by the following return:—

| | | | | |
|---|---|---|---|---|
| The number attended on | | Monday, Sept. | 27th, was | 369 |
| ,, | ,, | Tuesday, ,, | 28th, ,, | 335 |
| ,, | ,, | Wednesday, ,, | 29th, ,, | 258 |
| ,, | ,, | Thursday, ,, | 30th, ,, | 264 |
| ,, | ,, | Friday, Oct. | 1st. ,, | 182 |
| ,, | ,, | Saturday, ,, | 2nd, ,, | 102 |
| Total attendances for the week ... ... | | | | 1510 |

The doors of the hospital are opened at 8.30 A.M., and are closed at 10 o'clock. There is a notice posted outside requesting the patients not to sit upon the steps of the neighbouring houses, but at 9.30 several were so placed. There are two waiting-rooms, which afford very inadequate accommodation. The upper one is long and lofty; it is about sixteen feet wide, and is provided with benches, all of which were densely full. There were six rows of patients, and scarcely room to pass between. Notice is given that robberies are committed, and the patients are told to beware of pickpockets. There is a skylight for ventilation; but, with an assemblage of 200 persons, the air was very close. The second waiting-room is underneath the first, and partially below the surface of the ground. Near the door is an unventilated watercloset, and nearly a hundred persons were sitting on the stairs and in the garden of the hospital in preference to this dismal place. It will be obvious that the danger of propagating contagious disease is very great. During the year 1868 the following complaints were admitted:—

| | |
|---|---|
| Small-pox ... ... ... ... ... ... | 3 |
| Chicken-pox ... ... ... ... ... ... | 50 |
| Measles and sequelæ ... ... ... ... | 253 |
| Scarlatina and sequelæ ... ... ... | 160 |
| Typhoid fever ... ... ... ... ... | 18 |
| Febricula ... ... ... ... ... ... | 105 |
| Erysipelas ... ... ... ... ... ... | 4 |
| Diphtheria ... ... ... ... ... ... | 6 |
| Mumps ..... ... ... ... ... ... | 17 |
| | 616 |

We have thus, without including any of the many communicable diseases of the head and skin, 616 cases admitted in which there is more or less fear of contagion; and as each patient attends about five times, it follows that ten such patients would attend the hospital every day. Perhaps this is somewhat above the truth, as measures would be taken to admit contagious cases into the hospital, or otherwise to dispose of them; but as it is quite impossible to exclude these diseases, the danger of contagion forms an insuperable objection to the present arrangements. Nor would the difficulty be overcome by newer buildings with larger waiting-rooms, since the greater the assemblage of children the more certain will be the propagation of disease.

It will be observed that the largest number of patients attend at the beginning of the week. They are seen in two consulting-rooms, each being occupied by a physician and a qualified assistant, appointed with the sanction of the Hospital Committee. Advanced students also attend. The consulting-rooms are small, and not specially ventilated. Four mothers and their children are admitted at a time; and as there are usually ten or twelve persons in the room, the size of which is only adapted to about half that number, the air is very close. The physicians attend at 8.30 A.M., and rarely finish their heavy labours much before 1 P.M. The new and serious cases are referred to the physician, and the less important ones are seen by the assistant. Grave cases are admitted into the hospital, and during the month of September 30 patients were admitted in this way. There is little time to take notes of cases, but the physicians manage to do so to a limited extent. On the average, about 25 cases are seen by each attendant in the hour, new cases requiring more time and care. This, in the opinion of the physicians, is sufficient to afford the opportunity of giving fair attention to the cases. The patients attend once a week, and, in a professional point of view, it is considered that justice is as well done as the out-patient system permits.

When dismissed from the consulting-room, the patients congregate in a covered apartment while the medicines are dispensed. This, also, is even more densely crowded than the others, and although there are two dispensers, it is occasionally three o'clock before the whole are served. As the doors for admission are closed at 10 A.M., it follows that a mother and child may be detained in the waiting-rooms more than five hours.

This appears to us a matter demanding greater consideration than is given to it. The patients frequently come from Islington, Holloway, Greenwich, Woolwich, and other suburbs, and it may be questionable whether the advantages offered in the consulting-room are not dearly purchased by so much exposure, waiting, and fatigue, all of which act most injuriously upon the extremely young.

With respect to the social standing of the patients, the physicians remark that occasionally ladies present themselves who are elegantly dressed, but that by far the majority belong to a lower class. We saw none of the former, and believe that it would be impossible to commit the power of refusal to any officer. Complaints are indeed made by the local practitioners of the injury inflicted on them by this facility in obtaining gratuitous advice and help; but it is right to state that the Committee are evidently alive to the difficulty of discrimination. With every desire to extend over as wide an area as possible the benefits of the hospital, they cannot and do not shut their eyes to the fact that great vigilance is required to prevent the benefits of an institution intended for the relief of the really poor from being diverted to a class in very far better circumstances.

The defects of the Out-patient Department in Great Ormond-street Hospital culminate in the excessive number of patients, and we would seriously urge upon the Committee the danger of continuing the present system. We would advise that the number of new cases should be strictly limited, and the distribution of attendances more equally divided, both as regards the hour and the day. If the same amount of work is to be done, it is necessary that the staff should be increased, for we believe that the mind of the strongest physician will relax in its attention after the careful examination of some fifty or sixty cases. There should only be one physician and assistant present at a time, and the hours of attendance should be so arranged that no patient need have very long to wait. Preference should, on the whole, be given to cases coming from a distance, as, by doing so, they afford *primâ facie* evidence of a real need. We would strongly recommend some improvements in the present waiting-rooms, which require both light and air; but we consider that any augmentation of their size would but increase the danger of contagion.

Since closing the above Report, we have the greatest satisfaction in learning that our visit has not been made in vain. With praiseworthy alacrity, the Committee have given directions for improving the ventilation of both waiting-rooms, and have summoned a special meeting for Wednesday next to consider the whole question.

## THE PREVAILING EPIZOOTIC.

WE hope that we shall soon be enabled to place before our readers a special report on this subject. In the meantime, as it is just now naturally exciting a considerable degree of attention, we will lay before them some information, for which we are mainly indebted to the great courtesy of Professor Brown, of the Veterinary Department of the Privy Council.

Foot and mouth disease is not a new disorder; it has long been known to veterinary surgeons. It prevails at present over nearly the whole continent, and has assumed formidable proportions among our own herds. It is highly infectious, but whether this property is alone capable of explaining its prevalence as an epizootic is a point on which observers are not yet all agreed. Its occurrence in this country has certainly not always been due to the introduction of the disease from abroad by foreign cattle, for it prevailed here in 1839, and continued for two years, when no foreign cattle were introduced. There have been four or five outbreaks since that time, and it existed in this country to some extent in 1867. It attacks pigs, sheep, and cattle, and in 1844-45 it appeared among the poultry. In pigs the eruption is seen chiefly on the outside of the muzzle and about the feet, and in sows it attacks the udder. The disease is due to a blood-poison, and is attended with an eruption of vesicles on some parts of the skin and mucous membrane; in cows, particularly about the lips, tongue, palate, and pharynx, and the parts between the claws of the hoof. These vesicles vary in size, and sometimes form large bullæ. They rarely ulcerate, but after their rupture there remains a superficial breach of surface which soon becomes covered with a granular lymph. This lymph, however, does not appear to assume a diphtheritic form. It is occasionally redundant in quantity, and elevated above the surrounding surface, owing probably to the fact that its growth is not impeded by the pressure of any superimposed membrane. When the animal is attacked it looks depressed and out of health, and the secretion of saliva is greatly increased. The lips and mouth are covered with froth, quantities of which drop from them. Cows rarely lose their milk altogether. In mild cases it is diminished to about two-thirds, and in severe cases to one-third of the

natural amount. The average fatality of the disease is about ten per cent., but it sometimes much exceeds this, and the proprietor of a dairy in Islington, we understand, lost as many as eighteen cows out of eighty-six attacked. The majority of animals attacked recover in from eight to twelve days. In severe cases the symptoms of blood-poisoning are more prominently manifested; numerous swellings appear on the skin, which ultimately become attended with discharges. The chief contagious diseases to which cattle are liable are—cattle plague, pleuro-pneumonia, small-pox, and the epizootic under consideration. An animal may suffer from these in succession, or it may have pleuro-pneumonia and foot-and-mouth disease at the same time. The post-mortem appearances in fatal cases are in no respect peculiar; indeed there are no very obvious effects of any diseased action in the internal organs. But some important changes appear to ensue in the milk and blood of the infected animals. The specific gravity of the milk is generally diminished, but it throws up a fair layer of cream. On microscopical examination with a low power, large, round, and coarsely-granular or nebulous-looking bodies are discovered, which are quite different in size and appearance from those ordinarily found in milk. The fluid is liable to decompose more rapidly than natural, and to develop low forms of organisms. These changes occur at an early stage of the complaint, and continue for some time after the disappearance of the symptoms of the disease. The diminution in the amount of milk in infected animals involves a serious pecuniary loss, and that which is secreted seems to possess some poisonous qualities which render it quite unfit for the nourishment of their young. Pigs suckled by a diseased sow, for instance, very soon die, and the milk of infected cows is fatal to their calves; they have been on several occasions found dead. Under these circumstances it seems strange, if true, that children can partake of this milk without any appreciable effect on their health. Perhaps the dilution which it undergoes by being mixed with that from healthy animals will account for the difference in the result in the two cases. Be this as it may, according to Dr. Whitmore's investigations, it would appear that he has not been enabled to discover that the consumption of the milk by children was attended with danger or disease to them. Most of the cowkeepers confessed that the milk obtained from infected animals was put into the same cans with that from healthy cows, and sold to their customers. From the amount of disease which has existed in the dairies of Marylebone, there can be but little doubt that the inhabitants of that and other districts of London have been drinking milk from infected animals without its effects being traceable, in the weekly returns from the public institutions of the parish, in any increase or peculiar form of sickness among the children. The cowkeepers are said to give the milk freely to their own children; but we think Dr. Whitmore exercised a wise discretion in advising them to throw away all the milk obtained from infected animals. We have been informed by Prof. Brown that, as in cattle plague and contagious pleuro-pneumonia, monads and bacteria are very commonly found in the blood of animals suffering from this disorder; and irregular-shaped bodies, possessing a sluggish, amœbiform movement, may likewise be discovered in the same fluid by the microscope. When the recently drawn blood is examined, its corpuscles are generally found to have assumed a stellate form.

We cannot conclude our remarks without expressing the very high opinion that we entertain of the way in which the Veterinary Department of the Privy Council has discharged its labours, which have been of a very arduous and responsible character. The occurrence of this epizootic has thrown an enormous amount of work upon the officials. They have had to collect together all the requisite data for drafting the necessary Acts of Parliament and Orders of Council, to maintain a strict surveillance over our ports and agricultural districts, and at the same time to carry on a large amount of correspondence.

## THE ENTRIES OF MEDICAL STUDENTS.

THERE is perhaps an unusual desire existing this year to know how the various schools are faring as regards the number of new students who have commenced their career with the present session. This is not difficult to understand, in the presence of a revolution of opinion as regards medical education, not to mention other occurrences affecting the administration of the hospitals themselves. As far as we can judge, the total entries of new students are, on the whole, about the average.

We learn, from reliable sources that, up to the present time, Guy's takes the lead, with 97 new entries. St. Bartholomew's follows with 86; of these 77 have already registered. Next comes University College, whose numbers this year reach a total of 75. At St. Thomas's there are about 30 new students; at St. George's, 26. At King's there is a falling off, and the total this year is less than 30. At the London Hospital there are 25 new entries; at the Middlesex, 20; at St. Mary's, 18; at Charing-cross, 15; and at Westminster some half-dozen.

It is only right to add that these figures do not include the new entries of the past summer session: we have already said that the numbers only represent the entries up to the present time. It is possible that in several instances they may require to be altered in order correctly to represent the relative position of the schools, since the time for registration at the College has not yet expired; and until this is the case, there may be students who have not yet taken out their tickets, but will do so at the latest possible moment.

We may as well add that the College of Surgeons' returns as to the number of students registering, upon which many rely for information, cannot accurately represent the number of new students, for the simple reason that not a few never register at the College at all; and this is the more likely now that the licence of the College of Physicians is regarded by the Poor-law Board as a double diploma, and the M.R.C.S. is not so indispensable as regards public appointments as heretofore. In fact, we know that this year many of the new students at several of the hospitals do not intend to register at the College of Surgeons.

## INTRODUCTORY LECTURES DELIVERED AT THE PROVINCIAL MEDICAL SCHOOLS.

### QUEEN'S HOSPITAL, BIRMINGHAM.

THE Introductory Address was delivered by Mr. Sampson Gamgee. After some prefatory observations, Mr. Gamgee adverted to the principles by which the students should be guided in the acquisition of knowledge, and in its practical application, by saying:—"Take nothing for granted; be the pupil of no master, but of nature; train the mind to keep a sharp look out for fallacies in observation and reasoning; cultivate judicial impartiality; court criticism, and, however sharp it may be, learn to take it calmly; and, above all, never tire of seeking information from all quarters. Do not fall into the belief that it is only so-called clever people who can teach you. There are no such dunces in many things as some people who are very clever in one or two things, special faculties often being developed at the expense of the general powers of the understanding. Some of your most valuable lessons in professional life may be picked up from old women and hospital nurses; and, above all, do not run away with the very

prevalent fallacy that members of a hospital staff have any claim to intellectual monopoly in teaching practical medicine and surgery. However ambitious and successful you may be in pursuit of the higher branches of medical science, you will in practice be tested by your acquaintance with, and ability in carrying out, seemingly trifling details. A man is like a beam in this, that the strength of both is only equal to the strength of their weakest parts. Knowledge of physical diagnosis, animal chemistry, and operative surgery is of the first importance; but every now and then it will not save the possessor from cutting a sorry figure, if he cannot make and apply a poultice or a fomentation neatly and comfortably, or bandage a swollen and painful limb with the gentle touch of a lady's hand, and the mechanical accuracy of a skilled artisan."

Mr. Gamgee impressed upon his listeners the fact that to acquire the power of being calm, judicious, and unflinching in the direst extremities, they could not watch disease too closely. The pulse, the respiration, and the temperature of the body, accurately taken and compared, would be nearly as sure guides to them as the sextant and the lead to the mariner. "I know no theme," he went on to say, "on which more nonsense has been talked and written than on nature and art in the treatment of disease. As to the navigator, the engineer, and the artist, nature is our school, and her laws must be our guide; but art—and by that I mean intelligent, painstaking, and scientific art—furnishes an accumulation of rules and helps of the greatest value in working out, directing, and completing natural provisions. The resources of medicine and surgery have in modern times received additions of the greatest importance, but chemistry and electricity have only begun to be felt in practical operation. Medicated baths and inhalations are full of promise, and in many other channels the ardent and persevering inquirer may look for progress with the best-founded hope. In the vast educational work here projected, you will do but little if you fall into the common error of neglecting the accumulated stores of learning of all times and nations. That humane, learned, and philosophical surgeon, Charles Bell, in the 'History of Surgery,' has told us:—'We learn that art improves slowly, and by degrees scarcely perceptible in an age, and that what one man is able to do or accomplish is as nothing when compared to that accumulated knowledge which has descended from our predecessors. It is not merely in diminishing the resources of professional skill that this disregard of study is to be deplored. The neglect of the literature of the profession deprives the student of all enthusiasm and love for it; he is brought up deficient in liberal views, and is taught to overrate the importance of the person under whom he is educated, and to content himself to walk in the trammels of his particular practice. Those who are ignorant of the history of the art, and not aware of the observations and discoveries of the great men who have preceded them, are in continuous danger, in straining after new inventions, of only restoring what has been discovered, tried, and rejected before their time.' There can be no doubt that the modern additions to the science and practice of medicine and surgery have been numerous and of the highest importance; but what I would wish to impress is the necessity of culling learning from all ages and all nations. For depth of thought, originality of conception, completeness of erudition and eloquence of expression, the old writers are scarcely equalled by any of the modern; while, rich as the medical literature of this country is, anyone would form a very imperfect notion indeed of the literature of medicine who neglected the libraries of Italy, Germany, France, and the United States of America. One great advantage of extensive research is that it teaches toleration of different opinions, and proves that in the intellectual as in the physical world the line of progress is the resultant of opposing forces."

In conclusion, Mr. Gamgee said, that if they were to do justice to themselves and to the public, they must study and practise their profession in a scientific spirit, cultivating the general powers of the understanding, yearning after progress, endeavouring to attain to and comprehend general principles, neglecting no practical details, however in themselves seemingly insignificant, and taking their place in the ranks of the great army of workers who fight the good fight against ignorance and disease, mental obscurity, and physical degeneracy, with a clear and well-informed head, a stout heart, and a gentle but firm hand. Though they might learn to say with Pascal, that rest can only be attained by searching after truth; and though they might attain to the right of applying to themselves, without boast, the lines of Horace,—

> Si fractus illabatur orbis,
> Impavidum ne ferient ruinæ;

they would have to learn by experience that men of active imagination must be satisfied to rest below their aim. But they might find consolation in the reflection that in the intellectual and the moral world, the struggle after impossible perfection develops faculties and resources which eminently conduce to the increase of what apathetic men deem to be impossible good.

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## MANCHESTER ROYAL SCHOOL OF MEDICINE.

THE introductory address was delivered by Mr. S. Messenger Bradley, who applied himself to the questions, "What the students before him ought then to know, and what they had still to learn." There were two subjects which stood out prominently from all the rest as absolutely essential, and yet neither of them was made compulsory—namely, logic and physics. Everyone should understand at least so much of logic as thoroughly to comprehend the laws of the syllogism and of induction. Not that the one would teach the student to reason mechanically, or the other to invent; but that they would enable him to judge of the accuracy of another's reasoning, or of the truth of another's induction. In this way logic was of the greatest service as mental training, checking a man from forming a too hasty judgment, teaching him to weigh and consider. It taught us that knowledge is just what we ourselves thoroughly comprehend of truth and reason, and, further, as Locke says, that "the floating of other men's opinions in our brains makes us not one jot the more knowing though they happen to be true." The value of physics is much more manifest than that of logic.

"Do not suppose," the lecturer said, "that in thus urging upon you the study of logic and physics, I am in favour of your embracing a vast multiplicity of subjects as school studies. I am, indeed, altogether opposed to such a plan, for I regard the end of schooling to be *education* rather than *instruction*. Too frequently it is instruction that is considered as all-necessary; and, in consequence, a lad's memory is loaded with a mass of words and facts until a life-long mental dyspepsia is produced, while his intellect all the time is left in a state of chronic starvation."

Mr. Bradley then referred to the bearing of physics on modern medicine, describing the correlation of the various physical forces, and the identity of the physical and vital forces. He dwelt at some length upon the importance of a thorough knowledge of molecular physics, particularly dialysis, remarking that it was not unlikely it might be for a moment considered that such investigations had materialistic tendencies. He held that religion had nothing to fear from physics, any more than she had from geology or astronomy, which to many minds once appeared equally at variance with revelation; and the man who would on that account attempt to check the advance of physics, would welcome back "the sable throne of night primeval and of chaos old;" for it was ignorance and superstition alone that dreaded to face the light of knowledge and of truth.

Mr. Bradley then turned to the second part of his address, "What the students had to learn during their curriculum as students." He adverted to the principal advances made of late years in physiology, anatomy, comparative pathology, chemistry, materia medica, pathology, surgery, and medicine. In speaking of the last-named subject he said, "It is a very common practice now-a-days to decry the value of lectures on medicine, as well as on kindred subjects. I am strongly of opinion that this is an error. The lecturer gives you more condensed as well as more widely gathered knowledge than you can obtain for yourselves from books; and of this I am perfectly certain, that if you attend lectures, resolving to learn from them, you will not lose your time. There are two subjects, indeed, which I believe it would be well to add to the number of lectures already inflicted upon you: I refer to lectures on State medicine, and diseases of the mind. In regard to the former, many of the

grandest triumphs that medicine has achieved have been gained in the pursuit of an improved national hygiene. State medicine, indeed, is fast becoming one of the most important branches of our profession, fitness for which is only to be acquired by a special training. If such baubles possess any value, it is in State medicine, too, that State honours are to be obtained; and I look forward with perfect confidence to a not far distant time when the Minister of Health shall take his place in the Cabinet. With regard to lectures on mental diseases, I think, too, that they should be rendered compulsory, for it is almost certain that an early and more general acquaintance with the premonitory symptoms of insanity would often enable us to arrest the progress of a disease now sadly on the increase, and so restore to usefulness and society many an intellect that, for the want of such knowledge, is hopelessly overthrown."

After some further references to the advance of modern medicine, and the principal directions in which future progress was to be made, Mr. Bradley concluded with an earnest appeal to the students to remember that a great and noble work lay before them; and by reminding them of Carlyle's fine allusion to its dignity:—"Such work is of a religious nature, such work is of a brave nature, which it is the end of all religion to be. All work of man's is as the swimmer's: a waste ocean threatens to devour him; if he front it not boldly it will keep its word. By incessant wise defiance of it, lusty rebuke and buffet of it, behold how it loyally supports him, and bears him as its conqueror along."

# Correspondence.

"Audi alteram partem."

## HOSPITAL ABUSES: THE OUT-PATIENT SYSTEM.

*To the Editor of* THE LANCET.

SIR,—I hope the present agitation will not pass away without radical alteration of the out-patient system at our hospitals and dispensaries. I am not surprised at the attempt to sacrifice the first agitator of this question; but I hope, nevertheless, the Bartholomew's men and the Bartholomew's students will not flinch from thoroughly expounding and enforcing this very righteous question. You, Sir, have too often led the profession in the way of needful reforms not to know better than most of us that it is quite time, in the interests of everybody except obstructive old fogies, to review this system, or rather no system, capable of doing so much good, and doing so much evil. I do not want to urge the selfish reason, that indiscriminate prescribing at charities is injurious to the struggling members of our profession practising in poor neighbourhoods. I should not note this if the apparent good proved to be really a benefit to the poor; but it is not. The really sick and poor have to compete with those who are, in reality, neither sick nor poor. It is suspected—not to say known—that large numbers of those who haunt the hospitals and dispensaries on out-patient days are well able to pay; and other large numbers are morbid, not really diseased. Often, too, these people manage to get priority of attention. Thus the object of good substantial advice to the poor is defeated, and the charities are abused. Taking the numbers who crowd to our hospital, not many of the cases can have any effectual consideration.

With the readiest intellect and the best skill (the patients passing in a stream as in a panorama), the prescriber must be very wise indeed who can make much more than a lucky guess at his cases and their appropriate treatment. The late Dr. Addison of Guy's, for instance, had the happy knack of looking, putting a question or two, and of at once knowing his cases, so far as man might; but even he would have found it difficult to give to a competent critic a fair account of the faith that was in him as to most of his cases. Often I witnessed his exceeding but very natural irritability at the dead-lock so often occurring. Once I noted his stern reproof of a well-to-do woman in her furs, who happened to be overshadowing a really poor patient. I thought then that no other power than the One before whom, according to Dr. Johnson, the human race were permitted to parade their ills could have made anything of it.

Among the crowds who go as out-patients to hospitals, and who might well be sifted out, are the habitual hospital patients; often with little or no disease other than the morbid craving to talk of their ailments, and to take medicine in any quantity for any length of time. These, with a melancholy satisfaction, tell of their complaints and show their large bottles of stuff to their neighbours, getting in this way sympathy and imitation. There are the young with various forms of hysteria, showing not so much the need of medicine as of social alterations, of better training towards self-control, perhaps of facilities for emigration to those places in our empire which require women to adjust the balance of the sexes; and, as if to prove this position, there come in large numbers sinners who are the victims of this want of adjustment. Among the rest come those already glanced at, morbid miserly people, thinking—mistaken idiots as they are—that they are getting valuable advice and medicine for nothing.

He who complains should suggest a remedy. I beg with deference to do so. Every case *primâ facie* unmistakable, and there are many such, should pass at once. Others, doubtful in character or in circumstances, so as to be possibly unsuitable, should be under supervision. All cases, in fact, should be visited once in the middle of the medical week at their homes, the more so because in real illness a week is mostly too long for an unadjusted treatment.

To a certain number of students craving work of an improving character, and of learning the nature and character of the people as well as of their maladies, might be furnished the names and addresses of all interesting or doubtful cases within a certain distance. Due forms furnished, these could be easily reported on. I will not particularise as to the advantages to the poorer people, who ought not to be jostled by mean well-to-do people; to the students, who would learn something, and also learn not to shirk cases in such a rapid review; to the hospital physicians and surgeons, who would not be obliged to see and pretend to understand a hundred cases an hour; and to the commencing and struggling practitioner, who might and ought to be consulted and paid by many of these undeserving people.

I am, Sir, your obedient servant,

Newington-Causeway, Oct. 1869. WILLIAM RENDLE.

## CHOLERA ON THE NORTH-WEST COAST OF AFRICA.

*To the Editor of* THE LANCET.

SIR,—In your impressions of Aug. 21st and of Sept. 25th, you have drawn special attention to the recent outbreak in the Senegal and Gambia districts, which have been for the first time, as far as we know, the seats of choleraic invasion. On this ground alone the subject is one of very great interest, for it is only by carefully noting such events that we can ever attain to a knowledge of the geographical and chronological history of the pestilence. Duly to appreciate the significance of this appearance of cholera during the present year in the tropical region of the north-west coast of Africa, it will be useful to go back to the summer of 1865, when the epidemic broke out in Egypt, in connexion with the memorable prevalence of it at Mecca, and the return of the pilgrims to their different homes. It will be remembered that the subsequent manifestation of the disease throughout the Levant and the Mediterranean ports followed, in many instances, soon after the arrival of pilgrims and other persons from Alexandria, so that it was but reasonable to believe that the two events often stood in the relation of cause and effect, although the evidence adduced in support of this opinion generally lacked the necessary fulness and precision. It was at the time remarked as a noteworthy fact, however, that although crowds of the pilgrims returned to different places on the Barbary coast, nowhere in that direction did the disease spread, or show any tendency to become epidemic. The immunity of Tunis was very striking, for nearly all the pilgrims who arrived at Malta, and to

whose arrival the introduction of the pestilence into that island has been confidently ascribed, went on there as their point of destination. At Benghasi, too, intermediate between Alexandria and Tunis, many of the fugitive pilgrims went, and it is believed that not a few of them died there soon after reaching the place. Whatever may be the truth on this point—for unfortunately no precise information about it has ever been published,—it is certain that the disease did not extend to the inhabitants. The same seems to have been the case in respect of Algeria. Cases of cholera were repeatedly imported in 1865 by French Government steamers, and other vessels, from Marseilles, where the disease was so prevalent during the summer and autumn; but it never took root or became diffused among either the military or civil population.

Throughout 1866, the year when the continent of Europe was most widely and severely infected, there was little, if any (as far as I am aware), cholera in Africa. Egypt was nearly, if not altogether, exempt, and the Mecca pilgrimage passed over with extremely little sickness among the multitudes gathered together, as well during the assemblage as during the subsequent dispersion. Tunis still remained free, and Malta that year had no return of the malady. It was not till the spring of 1867 that it made its appearance in Tunis; whence or how it then came was wholly unknown. It spread from the town of that name along the coast to Susa in a south-easterly direction, and also, it was said, into the interior of the country. About the same time that the Tunisian states were suffering Algeria seems to have been more decidedly affected than it had hitherto been; and in August Malta, after an immunity of eighteen months, again became the seat of an outbreak, from which both the garrison and the civilians suffered considerably.

The part of the north African coast to the westward of Algeria appears to have continued unaffected till towards the end of this year, for the earliest public notice of the disease being in Tetuan, Ceuta, or Tangiers, was, I believe, in January, 1868. These places had entirely escaped in 1865, during the prevalence of the epidemic in Gibraltar (immediately opposite to Ceuta) and in the south of Spain, between which and this part of the Barbary coast there is a great amount of intercourse.

In the spring or early summer of 1868, the disease had reached to various points on the Atlantic coast of Morocco, to the south of Tangiers, and between the 35th and 33rd parallels of latitude, as at Larache, Casalblanca, Mazagan, and Saffi. Later in the season we heard of its being at Mogadore, still further to the south. Whether the disease had altogether ceased, as was reported, throughout the Morocco states in the latter part of the year, when St. Louis, the capital of the French possessions in Senegal, and in latitude 16°, was invaded, it is impossible to say. The intermediate country is very sparsely inhabited, and there is no place of any consequence on that part of the coast. The disease is believed to have spread inland from St. Louis along the course of the Senegal river; but we have no exact intelligence to enable us to follow its track.

In March, in the present year, it was raging in the British settlement of Macarthy's Island, nearly due east of the French possessions, and it was also moving more southerly along the coast in the direction of our colony of Bathurst, in latitude 13°, near the mouth of the river Gambia, where it appeared in May, and afterwards proved so disastrously fatal among the coloured population. This is the most southerly point which the pestilence has, as yet, reached along this part of the African coast. Whether and when it will extend further in this direction, and arrive at our important settlement of Sierra Leone, between five and six degrees nearer the equator, remains to be seen.

The preceding data serve, meanwhile, to show that in this part of the world the march of the pestilence during the last two years has been slow and progressive along an extended line of country. Similar events, it is well known, have been observed in other regions on former epidemics. Do not they seem to suggest, among other considerations, that there must surely be other factors or influences in the diffusion of cholera besides that of mere personal intercommunication? and that, unless the former are present at the same time, the latter agency is insufficient in itself to account for its extension from one place to another?

The only other point to which I would invite attention at present is, that in 1856, when there was a widespread diffusion of the pestilence along the coasts of Barbary and of Morocco, several of the islands in the Madeira and the Cape de Verde groups, suffered for the first time from a visitation of cholera. Madeira is in about the same latitude as Mogadore, and the Cape de Verdes in about that of Senegal. It would be a matter of no small interest to know whether there has been any unusual prevalence of choleraic or other intestinal disorders, during the present or last year, in any of these or of the intermediate Canary groups of islands. Possibly some reader of THE LANCET may be able to give the profession information on this point. The obtaining of trustworthy data about the synchronous health-state of different regions, especially of adjacent or contiguous countries, is one of the most important elements in the elucidation of the natural history, and particularly of the migratory course, of epidemic diseases.

I am, Sir, your obedient servant,

Richmond, S.W., Oct. 1869. GAVIN MILROY, M.D.

## AN UNUSUAL CASE OF VACCINATION.

*To the Editor of* THE LANCET.

SIR,—The following case is one of such unusual occurrence that I venture to ask you to give it a place in your columns.

Three months ago my partner vaccinated a child two years of age on the left arm, which failed to take effect. At the end of last month I vaccinated a younger member of the same family, and from this child on the seventh day I vaccinated the child previously vaccinated by my partner, but on the right arm. On the seventh day the child was brought to me, having three fine vesicles on the right arm and one on the left. I thought I must have vaccinated the child on both arms, but the nurse distinctly states that I did not touch the left arm, and of this I have a perfect recollection. The vesicle on the left arm was perfect, and in every respect resembled those on the right arm.

Two questions arise from this case. Has the vaccine used by my partner three months since lain dormant, and was it aroused into activity by the recent vaccination? Or can vesicles be produced on other parts of the body as the result of the introduction of vaccine virus into the system, in the same way as the virus from small-pox?

I am, Sir, your obedient servant,

JOSEPH MORRIS, M.D., M.R.C.S.

Poplar House, Barnsley, Aug. 14th, 1869.

## NEWCASTLE-ON-TYNE.

(FROM OUR OWN CORRESPONDENT.)

THE Northumberland and Durham Medical Society held its annual meeting at our Infirmary library on the 30th ult. On this occasion this flourishing and highly useful Society attained its majority. Only two or three of its original members were present, and, although the career of the Society must have fulfilled their most sanguine expectations, to them the retrospect could not fail to have a tinge of sorrow, remembering the absence of so many of the familiar faces of those who aided in the establishment of the Society twenty-one years ago, as the "Newcastle and Gateshead Pathological Society." At the meeting on the 30th ult. a proposition was brought forward by Dr. Eastwood, of Darlington, for the extinction of the Society as a separate body, by its union with the Northern Branch of the British Medical Association. Dr. Eastwood's important recommendation gave rise, as might be expected, to a long and rather animated discussion, and a good deal was said by various speakers for and against the proposed amalgamation; but the feeling of the meeting appeared to be against the union, at least in the manner suggested by Dr. Eastwood. The President (Dr. Gibson) could not see that the Society could derive any advantage from the union; on the contrary, he thought it might possibly forfeit many of its present highly prized features. Dr. Philipson and some other members thought that the advantages of union as regards both Societies were pretty fairly balanced; and, while carefully abstaining from any decided opinion on the matter in its

present crude state, Dr. Philipson moved the appointment of a mixed committee, composed of members of both Societies, to report to the December meeting upon Dr. Eastwood's proposition. This course was finally adopted; and the members will thus have full time for the serious consideration of the matter.

A very interesting case, in which the trephine was used with marked success, has lately occurred here in the practice of Mr. Anthony Bell, assistant-surgeon to our infirmary. The patient was a girl about nineteen years of age. When about seven years old, by a fall against a chair an indentation of the cranium was produced, just over the parietal eminence. She had ever afterwards suffered from pain at the spot, and occasionally from epileptiform convulsions and various head symptoms. This summer the fits became so frequent and severe that Mr. Bell, upon consultation, decided upon trephining, and removed bone to the circumference of a shilling; the dura mater was punctured, giving exit to a quantity of serous fluid. There was an immediate alleviation of the convulsive fits and other prominent symptoms, and the girl has now quite recovered.

From the report of the Newcastle Dispensary, read the other day at the annual meeting, it appears that 4866 patients have been admitted by letter during the past year, and 19,385 casual cases have been likewise treated; an increase on last year's work, and accounted for, not by any particular outbreak of disease, but by the increase of population in the western districts of the town.

A provident or self-supporting dispensary has been lately started here, and its promoters are most sanguine, of course, of success; but it is to be feared that there is some very up-hill work to do in the way of "educating" our working classes here to pay the doctor, as they are in a manner demoralised by gratuitous advice and the abundance of charitable institutions.

Newcastle-on-Tyne, Oct. 2nd, 1869.

## NEW YORK.

(FROM OUR SPECIAL CORRESPONDENT.)

THE removal of the New York Hospital from the site which it has occupied on Broadway for a century is one of the most important events of the current year, both to the medical profession and the public. In the year 1770, George III. "sent greeting to his loving subjects, Peter Middleton, Samuel Bard, and John Jones, physicians, by their humble petition presented unto our trusty and well-beloved Cadwallader Colden, Esq., Lieutenant-Governor, and granted a Charter for the Society of the Hospital in the city of New York, in America." Colden was also a physician, and warmly interested in the project of establishing an hospital. Large contributions to the funds for building the hospital were made by the citizens of London, and other places in Great Britain, through the influence of Dr. John Fothergill and Sir William Duncan. The plans of the building were prepared by Dr. John Jones, who had been a pupil of William Hunter, and who had visited all the large hospitals of Europe. He was at the time Professor of Surgery in King's College, New York, and was evidently far in advance of his contemporaries in a knowledge of the faults of hospital architecture. It may not be uninteresting at this time, when hospitals are on their trial, to hear the comments of this eminent surgeon and observer made one hundred years ago. "If," he says, "great and populous cities have been justly styled the graves of the human species, the large and crowded hospitals generally built in them may, with equal truth and propriety, be deemed the lazarettos or pest-houses of most of the unfortunate persons who, from ill-directed motives of compassion, are carried into these charities. In the two great hospitals of St. Thomas and St. Bartholomew, in London, about six hundred patients die annually, which is about one in thirteen of those who are admitted as in-patients.....The Hotel Dieu, a vast building, situated in the middle of that great city (Paris), receives about twenty-two thousand persons annually, one-fifth of which number die every year. It is impossible for a man of any humanity to walk through the long wards of this crowded hospital without a mixture of horror and commiseration at the sad spectacle of misery which presents itself. The beds are placed in triple rows with four and six patients on each bed, and I have more than once, in the morning rounds, found the dead lying with the living..... If we compare the numbers of patients who die in the county infirmaries of England with those of the London and Paris hospitals, the proportionate difference will be greatly in favour of the former; and, although the putrid air of great cities is more unfavourable to health in general than that of country towns, yet the greatest difference in mortality will be found, upon a close and fair examination, to arise from the structure and crowded wards of the hospitals in overgrown capitals. For, if to the comparison between the mortality in large city hospitals and those of country towns, we further add the proportional difference between the last and that of private practice, it will be found to be in favour of the latter. From all which facts it evidently appears how essentially necessary pure fresh air is to the cure of diseases in general, and particularly those which arise from putrescent causes, either internal or external."

Dr. Jones attributes the faults in hospital construction to the ignorance of architects as to their real uses and wants, and who "confine their views entirely to objects of convenience, cheapness, or ornament; and in one of the last hospitals built in London, for lying-in women, there is more expense bestowed upon an elegant chapel in it than would have finished four wards."

In the construction of the New York Hospital, Dr. Jones seems to have had no opposition to the full adoption of his plans; and after such an exposition of the faults of existing hospitals, it will not surprise anyone to learn that those plans embodied nearly all the latest principles of hospital architecture. The hospital was begun in 1773, and when nearly finished, in 1775, was burned. Just previous to this event, Dr. Jones wrote as follows:—

"It is to be hoped that the hospital lately built in the City of New York will have fewer objections to its plan than any hospital hitherto constructed. The principal wards, which are to contain no more than eight beds, are thirty-six feet in length, twenty-four wide, and eighteen high; they are all well ventilated, not only from the opposite disposition of the windows, but proper openings in the side walls, and the doors open into a long passage or gallery, thoroughly ventilated from north to south."

It was in 1778, five years after this hospital was planned, and three years after it was built, that the famous French Commission reported the pavilion plan of rebuilding the Hôtel Dieu. This Commission has hitherto had the credit of originating the pavilion plan. It should be noticed that in the New York Hospital the amount of cubic air and space to each patient was nearly 2000 feet. The hospital was rebuilt, but on a different plan, on the former site in 1791, where it remained until the present year. It has been the theatre of many of the most brilliant operations in American surgery. Here Post successfully ligated the subclavian in 1817; here Mott placed the first ligature around the innominata in 1818; and here Rodgers performed a similar operation upon the first part of the left subclavian in 1845. In surgery and medicine this hospital reflected the latest and most important improvements throughout its long and honourable career. In yielding its beautiful site to the imperious demands of commerce, the hospital retires, with ample endowments, to its reserved lands on the northern part of the island, maintaining only a single building in the business centres of the town for the reception of the sick and injured.

New York, Sept. 28th, 1869.

## ROYAL COLLEGE OF SURGEONS.

AT the meeting of the Council on Thursday, the 14th instant, on the motion for the confirmation of the Minutes of the special meeting of the 7th, an amendment was proposed that that part of them which related to the following resolution be not confirmed:—

"That it is the opinion of this Council that the examination in general education should be entirely left to the national educational bodies recognised by the General Medical Council."

The amendment, after considerable discussion, was negatived, seven voting for it, and ten against it.

It was then moved that the Minutes of the same meeting so far as regarded the recommendation of the institution of a joint examining board for each division of the United Kingdom, be not confirmed. The resolution referred to runs as follows:—

"That it is the opinion of this Council that there should be instituted a single examining board for each division of the United Kingdom, before which every person who desired a licence to practise should appear, and by which he should be examined, and that a diploma from either of such examining boards should entitle the holder to practise medicine, surgery, and midwifery in any part of Her Majesty's dominions."

This amendment also, after an animated debate, was lost, five voting in its favour, and fourteen against it.

The consideration of Mr. Hancock's proposition, for the appointment of a Board of Anatomy and Physiology, was postponed till the next meeting.

# Medical News.

APOTHECARIES' HALL. — The following gentleman passed his examination in the Science and Practice of Medicine, and received a certificate to practise, on Oct. 7th:—

Farnivall, Henry Wallace, Hutton, near Weston-super-Mare.

As Assistant in Compounding and Dispensing Medicines:—

Wheeler, Frederick William, Bedford.

The following gentleman also on the same day passed his first professional examination:—

Newman, Ashwin Conway, Guy's Hospital.

ST. GEORGE'S HOSPITAL.—At the quarterly meeting of the Governors, held on October 8th, B. Lancaster, Esq., in the chair, the following prizes were awarded to the students who had distinguished themselves in the medical school attached to the hospital during the session 1868–69:—The William Brown exhibition (£40 per annum, tenable for three years), Mr. Rowland; Sir Charles Clarke's prize, Mr. Vasey; The Thompson medal, Mr. E. G. Barnes; Sir Benjamin Brodie's clinical prize in surgery, Mr. Palmer; The Acland clinical prize in medicine, Mr. Noad; The Johnson memorial prize in anatomy, Mr. Baber; certificate, Mr. Brabant. General proficiency prizes:—Third-year's students: Prize, Mr. E. G. Barnes; Hay certificate, Mr. Bowles; certificates of proficiency, Messrs. Harrison, Noad, Palmer, Squire, and Vasey. Second-year's students: Prize, Mr. Norman; Hay certificate, Mr. Brabant. First-year's students: Prize, Mr. Goldsmith; extra prize, Mr. Stradling. Honorary certificates, Messrs. Thrupp, Winterbottom, and Warden (chemistry). Certificates of proficiency: Messrs. Athill, Colthart, Hale, McHardy, and Robinson.

AN operation of Ovariotomy is expected to be performed this day (Saturday), at Queen Adelaide's Dispensary, Bethnal-green-road, at three o'clock, by Mr. Maunder.

MEDICAL SOCIETY OF LONDON.—The first ordinary meeting will be held on Monday next, October 18th, at 8 P.M., when papers will be read by Mr. Henry Hancock, "On a Peculiar Form of Syphilis of the Neck, simulating Epithelioma," and by Dr. Andrew Clark, "On the Part which Pleurisy plays in the Production of Phthisis."

THE PHARMACEUTICAL SESSION.—The first evening meeting of the Pharmaceutical Society in the present session was held at Bloomsbury-square on Wednesday, the 6th instant, Mr. H. Sugden Evans presiding, and was marked by an unprecedented attendance of ladies, as well as gentlemen. The first business of the evening was the distribution of prizes to the successful competitors of last term, after which an introductory address was delivered by Mr. Henry Deane, F.L.S., than whom no more earnest votary of the science of pharmacy, and faithful promoter of the best efforts of the Society, could be found. His kind and honest advice to his younger brethren was listened to with marked attention. We regret that space does not permit of its publication. In moving a vote of thanks to Mr. Deane, Dr. Headlam Greenhow, recently appointed by the Privy Council to be present during the examinations instituted, or rather made compulsory, by the Pharmacy Act of 1868, spoke in warm terms of his address, and no less satisfactorily of the proceedings of the board of examiners, and the good which he believed had resulted from the institution of the Pharmaceutical Society.

DR. CHARLES JAMES SHAW, who was convicted last year of an infringement of the Lunacy Laws (THE LANCET, 1868, vol. i., p. 729), and sentenced to fine and imprisonment, has passed his first examination in the London Bankruptcy Court, to which he has been obliged by his position to resort.

THE deaths from scarlet fever in London last week were 216, showing therefore a slight deduction in the mortality on the previous week's return.

DR. DAVID LESLIE writes to the "South London Press," asking for support to the Wimbledon Common Defence Fund, and in his letter makes a statement to the effect that Lord Spencer "has sanctioned, without the consent of any of the Commoners, an inclosure of 140 acres, on lease for a long term, for farming purposes, by utilization of sewage." Mr. Peek, M.P., has filed a Bill in Chancery to contest Lord Spencer's right to do as he pleases with the Common.

A CORRESPONDENT of the "Essex Standard" states that, having gone to sleep leaving a night-light burning, which he had taken from a box marked "Price's Patent Child's Night Lights," he was awakened about two hours after by an explosion, followed by an immediate "flare-up." The paper case of the night-light he found had exploded, and was in fragments on fire on the toilet-cover. In the saucer a teaspoonful of oily fluid was floating, and the vapour from the explosion is described as "suffocating."

WE have been requested to state that the late Mr. Barber, whose death we recorded as having taken place whilst staying at the Royal Clarence Hotel, Ilfracombe, did not commit suicide. The deceased officer was in the habit of taking narcotics for some affection under which he was labouring, and it is supposed that he accidentally swallowed too large a quantity.

SAFETY OF DR. LIVINGSTONE. — Dr. Kirk has received a letter from Dr. Livingstone, dated "Lake Banglewo, July 8, 1868," saying, "I have found what I believe to be the source of the Nile, between 10 deg. and 12 deg. south." Dr. Livingstone was in good health and spirits when the letter was despatched. A letter of Dr. Kirk to the Bombay Government has been published, stating that a caravan which has reached Zanzibar reports Dr. Livingstone's arrival at Uiyi. The road between the coast and Uiyi was open and safe. Small parties of men and another caravan were expected.

MR. GEORGE TATHAM, M.R.C.S. Eng., has been placed on the Commission of the Peace for Brighton.

# Medical Appointments.

ADAMS, Mr. W. H., has been appointed Dispenser at the Workhouse Dispensary, Southampton, vice Chambers, deceased.

ARDUCKLE, H. W., M.B., L.R.C.P.Ed., L.F.P. & S. Glas., has been appointed Medical Officer to the Workhouse of the Thorne Union, vice J. J. Littlewood, resigned.

ATHILL, L., M.D., has been appointed Physician for the Treatment of Diseases of Women, Adelaide Hospital, Dublin.

BARNARD, Mr. J. H., has been appointed Assistant to the House-Surgeon of the Chichester Infirmary, vice Workman, resigned.

BLANDFORD, J. W., M.R.C.S.E., of Coxhoe, Co. Durham, has been appointed a Certifying Factory Surgeon, vice D. Clark, L.R.C.P.Ed., deceased.

BOGG, E. B., M.D., has been appointed Acting Physician to the Chelsea, Brompton, and Belgrave Dispensary.

CREERY, Dr. A., has been appointed Resident Medical and Surgical Officer to St. Mary's Hospital and Dispensary for Women and Children, Manchester, vice J. A. Giddings, M.R.C.S.E., resigned.

FETHERSTON, G. H., M.D., L.R.C.P.Ed., has been appointed Honorary Physician to the Melbourne Lying-in Hospital.

GLOAG, G. A., L.K.Q.C.P.I., has been appointed a Resident District Surgeon to the Bristol Dispensary, vice Lansdown, resigned.

HEPPERMAN, E., L.R.C.P.Ed., has been appointed Surgeon to the Brancepeth Collieries, Spennymoor, Durham, vice D. Clark, L.R.C.P.Ed., deceased.

IZARD, H., M.D., has been appointed a Justice of the Peace for the Borough of Weymouth.

KEATING, M. J., L.K.Q.C.P.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Kilmeaden Dispensary District of the Waterford Union, vice H. Lannigan, L.K.Q.C.P.I., deceased.

LEWIS, C., M.R.C.S.E., has been appointed Assistant House-Surgeon to the Royal Portsmouth, Portsea, and Gosport Hospital, vice J. M. Kirkman, L.R.C.P.L., resigned.

M'GILL, Mr. A. F., of King's College Hospital, London, has been appointed Resident Medical Officer to the General Infirmary, Leeds, vice Charles Bradley, M.R.C.S.E., L.S.A.L., resigned.

MARSDIN, F., M.B., has been appointed Medical Officer for District No. 1 of the Eastbourne Union, Sussex.

MOORE, J., L.R.C.P., has been appointed Junior House-Surgeon to the Preston and County of Lancaster Royal Infirmary.

MORTON, J., M.D., has been elected President of the Glasgow Southern Medical Society.

MYLES, J. T., L.R.C.P. & S. Edin., L.A.H. Dub., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., to Abbeyshrule Dispensary, Ballymahon Union, Co. Longford, vice J. H. McManus, resigned.

PACKMAN, Dr. A. W. K., has been appointed Medical Officer to St. Edmunds College, Old Hall-green, Herts.

PALMER, W. J., L.S.A.L., has been appointed Resident Medical Officer to the Great Yarmouth Hospital, vice Colley, resigned.

RONALD, R. W., M.D., has been elected Vice-President of the Glasgow Southern Medical Society.

SMITH, Dr. R., has been appointed Medical Officer and Public Vaccinator for the Island of Sanday, Orkney, vice P. Wood, L.R.C.S.Ed., resigned.

SMITH, W., M.R.C.S.E., has been appointed Medical Officer for the Islip District of the Bicester Union, Oxfordshire, vice F. W. Parsons, L.R.C.P.L., resigned.

SNAPE, J., L.R.C.P.Ed., has been appointed Medical Officer to the Upton District of the Wirral Union, Cheshire, vice R. C. Gibb, M.R.C.S.E., resigned.

SUDDEN, E., M.R.C.S., &c., has been elected President of the Bradford Medical and Chirurgical Society, vice W. Burnie, M.D., who retires.

STEWART, W., L.R.C.P.Ed., has been elected Medical Officer for the Barnsley Union Workhouse, vice W. T. Young Smith, L.R.C.P.Ed., resigned.

WARD, H. S., M.R.C.S.E., has been reappointed Medical Officer and Public Vaccinator for the Tetford District of the Horncastle Union, Lincolnshire.

WEDDELL, Dr. J. C., has been appointed Senior House-Surgeon to the Preston and County of Lancaster Royal Infirmary.

WHITTINGHAM, A. W., L.D.S. R.C.S.E., of Hanley, has been appointed Dental Surgeon to the North Staffordshire Infirmary, Hartshill, Stoke-upon-Trent.

# Births, Marriages, and Deaths.

## BIRTHS.

KNOX.—On the 9th inst., at Bakewell, the wife of John Knox, M.D., of a son.

LADE.—On the 3rd inst., at King's Lynn, the wife of Geo. Lade, M.D., of a daughter.

PEACOCKE.—On the 30th ult., at Dublin, the wife of George Peacocke, M.A., M.D., Staff Surgeon Army Medical Department, of a daughter.

PIM.—On the 5th inst., at Lucan, the wife of F. Pim, L.K.Q.C.P.I., of a son.

RAMSAY.—On the 3rd inst., at Hutton-Buscel, Yorkshire, the wife of Wm. Ramsay, L.R.C.P.Ed. L.R.C.S.Ed., of a son.

SMITH.—On the 6th inst., at Clapham-road, the wife of Wm. Henry Smith, M.R.C.S.E., of a son.

WEBB.—On the 4th inst., at Dresden, the wife of R. Webb, M.R.C.S.E., Surgeon 2nd Batt. 14th Regiment, of a daughter.

WIGG.—On the 13th inst., at West Villa, Southminster, the wife of Thomas Carter Wigg, M.R.C.S.E., of a son.

## MARRIAGES.

BOAST—GRISDALE.—On the 6th ult., at the Parish Church, Wymondham, Norfolk, B. R. Boast, L.R.C.P.Ed., L.F.P. & S. Glas., to Elizabeth, youngest daughter of the Rev. J. Grisdale, Head Master of the Wymondham Grammar School.

GORDON—EDWARDS.—On the 30th ult., at St. David's Church, Llanwonno, James H. Gordon, M.D., of Ferndale, to Emily Frances, youngest daughter of Mr. Edward Edwards, late of Pontypool.

PERKINS—HOLMES.—On the 7th inst., at Castle Bromwich, Warwickshire, John Robert Perkins, of Hendon, N.W., late House-Physician to the Royal Hospital for Sick Children, Edinburgh, &c., to Emma Kate, third daughter of the late Jasper Holmes, Esq., of Upper Tulse-hill, Surrey.

WARD—MACDOUGALL.—At Upper Gray-street, Edinburgh, William J. C. Ward, M.R.C.S., of Bedford-gardens, Kensington, to Violet Anne, youngest daughter of John Macdougall, Esq., of Gualeguaychu, Entre-Rios, South America.

## DEATHS.

DAVIES.—On the 8th inst., Francis Davies, M.R.C.S.E., of Pershore, Worcestershire.

DICKSON.—On the 12th inst., Samuel Dickson, M.D., of Bolton-street, Piccadilly, aged 67.

DUNDERDALE.—On the 30th ult., at Neville-terrace, Hornsey-road, Susan Matilda, the wife of W. Dunderdale, M.D.

FLINT.—On the 6th inst., Richard Flint, F.R.C.S.E., J.P., of Tiviotdale, Stockport, aged 74.

GRABHAM.—On the 11th inst., at Pontefract, from scarlet fever, after three days' illness, Harriet, the beloved wife of Charles Grabham, M.B.

GREENWOOD.—On the 5th inst., Darnton Greenwood, L.S.A.L., of Clapham-common, aged 68.

JOPLIN.—At Ballan, Victoria, John Joplin, M.R.C.S.E., formerly of Newcastle-upon-Tyne, aged 74.

KERSHAW.—On the 30th ult., at Park House, Royton, William Kershaw, M.D., F.R.C.S.E., in his 55th year.

# Medical Diary of the Week.

### Monday, Oct. 18.

ST. MARK'S HOSPITAL.—Operations, 1½ P.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8 P.M. Mr. Henry Hancock, "On a Peculiar Form of Syphilis of the Neck simulating Epithelioma." — Dr. Andrew Clark, "On the part which Pleurisy plays in the Production of Phthisis."

### Tuesday, Oct. 19.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8 P.M.

### Wednesday, Oct. 20.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
OPHTHALMIC HOSPITAL, SOUTHWARK.—Operations, 2 P.M.

### Thursday, Oct. 21.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
HARVEIAN SOCIETY OF LONDON.—8 P.M. Mr. Gascoyen, "On Varicocele."

### Friday, Oct. 22.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CLINICAL SOCIETY OF LONDON.—8½ P.M. Mr. Howard Marsh, "On a Case of Cleft Palate."—Mr. De Morgan, "On a Case of Fracture of the Skull, with subsequent Coma and Hemiplegia; Recovery; Sudden Death."—Dr. Headlam Greenhow, "On Diphtheria Paralysis."

### Saturday, Oct. 23.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL FREE HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

# Notes, Short Comments, and Answers to Correspondents.

### THE SOUTHAMPTON INFIRMARY.

ACCORDING to the *Southampton Times* of the 2nd instant, it would appear that the late surgical appointments to the infirmary of that town had not by any means given universal satisfaction. A comparatively young practitioner, it is asserted, has been made senior surgeon; while another gentleman, the junior of his competitors, has been elected to the post of assistant-surgeon. We are far from thinking that seniority should be made a claim for hospital appointments, except where the qualifications and abilities of the candidates are in all other respects equal; but we certainly hold that all proceedings in connexion with such appointments should be carried out in a way that will stand the test of public criticism. If it be true that one of the appointments was virtually filled up before any notice of the vacancy was given, we can only say the course adopted was a vicious one. Everything should be conducted fairly and openly, and the selection should be made with the sole object of benefiting the institution by securing the services of the best man. We cannot expect that an hospital will obtain the support of the charitable or the confidence of those who are likely to seek relief at it unless this principle be acted on.

### WHAT ARE THE USES OF THE UVULA?

*To the Editor of* THE LANCET.

SIR,—Several months ago a letter of mine appeared in THE LANCET, putting the following questions: What are the presumed uses of the uvula? and what known injurious effects have resulted from its removal? To my great disappointment, no answer ever appeared; but so great was the interest felt in the subject, that I received numerous requests, and from many persons eminent in the profession, begging as a favour, should I receive any private communications on the matter, that I would inform them of it. I received none. Is there no lecturer on physiology, no hospital surgeon, who will condescend to enlighten his brethren, and enable them to combat adverse popular prejudices? Yours obediently,

Hastings, October 5th, 1869. C. B. GARRETT, M.D.

### THE MEDICAL WORK OF THE ARMY.

PROFESSOR AITKEN, in his Introductory Lecture at the Army Medical School at Netley, briefly reviewed the various campaigns that have taken place during the past fifteen years in different countries, and pointed out how medical science had thus periodically advanced and sanitary improvements been effected. Commencing with the Crimean war, he remarked on the rapid diminution of mortality that occurred when rigid sanitary measures were adopted, reducing in one year the death-rate from 600 to 44 and 33 per 1000 per annum, and ultimately to 8 per 1000 at the termination of the war, when the average deaths amongst the infantry at home amounted to 17 per 1000. We do not know how far the account given of Professor Aitken's lecture in the *Pall Mall Gazette* may be considered as accurately representing what he said; but assuming it to have been a correct report, we may venture to make a few comments thereon. There can be no doubt that of late things have changed, and changed in a remarkable degree for the better in all that concerns the health and comfort of our troops, and that this result has been brought about since the date and in consequence of Lord Herbert's Commission. But the difference in the condition of the troops at the commencement as compared with their state at the termination of the Crimean campaign can scarcely be cited as an illustration of the benefits that have accrued from sanitary science. Starvation, hard work, insufficient clothing, and exposure, singly or combined, are sufficient, in all conscience, to kill men and animals; and common sense and everyday experience, without science of any kind, sanitary or other, were quite capable of finding a remedy in good food, warm clothing, and rest. During the celebrated Crimean winter the men may be said to have killed the horses, for these were worked to death by the superior endurance of the former. When these wretched animals were, from starvation, eating each other's manes and tails, and even the flesh itself, so that a body of splendid chargers, of which any nation might have been proud, was reduced to so many tailless, maneless skeletons, there was not much room for the exercise of sanitary science; and the soldiers were very little better off than their horses. The statistical returns since 1859 show that the mortality in all branches of the service at home has been reduced; and a circular just issued by the War Office directs that in all future hospital arrangements the per-centage accommodation is to be calculated at 6 instead of 10, as formerly. We must say, however, that we are very sceptical as to the truth of the statement that attention to hygienic measures has practically effected this reduction of sickness to the extent of 4 per cent. per annum. We quite concur with Dr. Aitken as to the necessity that now exists for a reorganisation of the transport service; and as to the practical lesson taught us by the late American war, where the hospitals, which were all under exclusively medical control, were the most successful ever known.

*M. A. B.*—It is of trifling importance, and we are quite sure that no blame attaches to our correspondent for the error.

### THE DILATABILITY OF THE FEMALE URETHRA.

*To the Editor of* THE LANCET.

SIR,—With reference to Mr. C. A. Hemingway's letter in your number for July 3rd, 1869, I enclose for his information short notes of three cases of calculus vesicæ in the female, taken from my note-books.

CASE 1.—A Mussulmanee, aged forty. Duration of symptoms, five years. No urine retained for more than two years. On August 27th, 1864, she was operated on. The urethra was slowly dilated; time occupied, forty-five minutes. As the stone was large, two lateral incisions were made through the anterior two-thirds of the urethra. The calculus was extracted with difficulty. Weight of calculus, 1080 grains; shape, globular; size, 2·2 inches by 2·2 inches by 2·1 inches; circumference, 6·25 inches. To this something must be added for the forceps. She was discharged cured on the ninth day, having complete control over her bladder.

CASE 2.—A Hindoo female, aged fifty. Duration of symptoms, ten years. Urine not retained at all for eight years. The end of the calculus was lying external to the bladder. The urethra was so much dilated that a pair of forceps was introduced, and the calculus readily removed without any need of dilatation. Weight of calculus, 168 grains; shape, fusiform; circumference, 3·75 inches. She was discharged, with complete control over her bladder, on the eighth day.

CASE 3.—A Hindoo female, aged sixty-five. Duration of symptoms, three years. On June 28th, 1869, the urethra was rapidly dilated, and, as the stone was large, bilateral incisions were made through the anterior two-thirds of the urethra. Weight of calculus, 1200 grains; shape, triangular, flattened; circumference, 5·25 inches. No incontinence of urine resulted, and she was discharged on the fifth day, with complete control over her bladder, and quite well.

Yours truly,
A. GARDEN, M.D.,
Saharunpore, July 29th, 1869. Surgeon, Indian Army.

WE have received several letters on the question of "Antiseptic Surgery" in reply to the letter of Dr. Black, which appeared in our last number. We will try to find space for some of them next week.

*Dr. James Palfrey.*—When the statement referred to is published, our correspondent will have an opportunity of replying to it.

### "CASE OF ABDOMINAL PAIN."

*To the Editor of* THE LANCET.

SIR,—Has your correspondent, "Rusticus," tried dilute sulphuric acid, with sulphate of magnesia, &c., and the treatment generally adopted for colica pictonum, as the symptoms described by him are not unlike those of lead colic?

Trusting your correspondent will continue to favour the profession with the result of his further treatment in a case so obscure and interesting,

I am, Sir, yours obediently,
October 10th, 1869. A., M.D.

### THE PHYSIOLOGY OF THE SULPHO-CYANIDES.

IN the Proceedings of the Royal Society (No. 114) is an account of a number of observations undertaken by Dr. Leared, to explain the presence and action of sulpho-cyanides in the blood and urine. Much difference of opinion has existed on the subject. The existence of the potash salt in the saliva cannot be denied. As regards its constancy, Dr. Leared found that it was present in varying amount in 45 out of 50 persons; that when absent, it was so in those of feeble health, being most abundant in those of a vigorous constitution. The sulpho-cyanide was also found in the urine and in health on an average of one-eighth of a grain in sixteen ounces; also in the blood and the serum; and it is suggested that red blood owes its colour to the iron compound, and that the saliva derives its supply of sulpho-cyanide from the blood, and not from any process of evolution carried on in the salivary glands. Finding that a solution of sulpho-cyanide of potassium (one grain to an ounce) possessed antiseptic properties, Dr. Leared is inclined to think that this compound may be useful in the economy in keeping in due check the process of fermentation in the stomach. Lastly, Dr. Leared found that in all diseases in which wasting of the body was marked, the excretion in the urine of a sulpho-cyanide, in common with other substances, was unusually great, the increase corresponding to a diminution of the salt in, or its disappearance from, the saliva. Dr. Leared points out the difficulties in the way of an accurate chemical detection of sulpho-cyanides in blood and urine. His observations, given here in outline, are interesting and worthy of attention.

### THE TITLE OF "DOCTOR."

*To the Editor of* THE LANCET.

SIR,—In reading the different opinions upon the title of "Doctor," I am reminded of the wolf and hyæna fighting for the lamb, when the jackal steps in and takes it; for I really think that the general practitioner has the only *bond fide* right to it. The M.D. is a Doctor of Medicine; the physician none at all. But if the woman is in labour it is, Send for the doctor; if the child is sick it is, Fetch the doctor; or if the husband is injured it is, Run for the doctor. Now, custom is the rule in rhetoric; and if the signification of a word is intended in its expression, every medical man is entitled to the ready and euphonious appellation of "Doctor." It is the salutation at the nabob's, the echo at the tradesman's, and the sympathy at the pauper's.

Now, what I propose is that every qualified man, registered, shall simultaneously style himself "Doctor," which neither a M.D. nor a Physician can cavil at, as they have no more legitimate right to it than I have.

I am, Sir, your obedient servant,
October 8th, 1869. M.R.C.S., L.S.A.

*To the Editor of* THE LANCET.

SIR,—Do licentiates of the London College of Physicians who possess a degree from Erlangen violate the bye-law of the College (referred to by your correspondent, "A Physician, and also a M.D.," in your impression of Sept. 25th), seeing that these degrees are not recognised in this country? Licentiates of the Edinburgh College of Physicians have, I believe, no such bye-law prohibiting their use of the title of "Doctor." I presume a L.R.C.P. Lond. and M.D. Erlangen could hardly call himself a Doctor of Medicine or Physician in a court of law. A counsel, on referring to the Register, would see that the Doctor's degree was not registered, and a reference to the College bye-laws would show that he was not a Physician.

I am, Sir, yours truly,
October 10th, 1869. M.D. ST. AND., L.R.C.P. EDIN.

### "NATURAL CAUSES"!

WE gather from the *Lincolnshire Chronicle* that an inquest was lately held on the bodies of three children at Sleaford, who had died within two days each from convulsions supervening on diarrhœa, which had been preceded by whooping-cough. A verdict of "Natural causes" was returned, the *Chronicle* stating that the surgeon who was called in previous to the deaths saw "no cause for suspicion, except the very unusual circumstance of three children dying in one house apparently from the same cause in so short a time." Query—Are whooping-cough, diarrhœa, and convulsions in any proper sense "natural" causes of death?

*J. E. D.*—One guinea.

### THE "SIAMESE BAND."

*To the Editor of* THE LANCET.

SIR,—Will you allow me to call the attention of your readers, and perhaps the surgical instrument makers, to the new French toy, "Ménager mal Jeune Homme," called in the English toy-shops the "Siamese Band," as a most excellent means of applying traction to a dislocated thumb or finger. As the shopmen say, "One trial will suffice" to prove the point.

Yours very faithfully,
Lancaster, October 11th, 1869. METCALFE JOHNSON, M.R.C.S.E.

*** This point was referred to by us last week, in a notice of the "Siamese Link."

*T. J.*, (Preston.)—Cards like that forwarded by our correspondent can only be considered as degrading productions for a member of the medical profession; but there is, we fear, no direct remedy. Happily, however, the good sense of the public generally prevents their ultimate success.

*Phys.*—We consider the "correct thing" is for the new-comer to make the calls on the resident men. The ordinary rules of etiquette should lead a gentleman to return a visit or leave his card, unless he did not desire the acquaintance.

### ACETATE OF LEAD FOR WATERPROOF GARMENTS.

*To the Editor of* THE LANCET.

SIR,—In reference to the inquiries of "A. S. B.," as to the safety of a waterproofing receipt quoted by him, allow me to remark that the resulting sulphate of lead is insoluble, that it is not directed to be used, and that the waterproofing properties of the solution (if it have any) are due to the *soluble* acetate of alumina.

Yours, &c.,
Edinburgh, October 12th, 1869. W. FORBES, M.D.

### FACES OF PHYSIC.

SEEING a notification in one of the rooms of the College of Physicians that it was proposed to make a collection of printed engravings of Fellows and Members, past and present, of that body, to be placed in the library, we had the curiosity to see if any response had been made to the invitation, and discovered in a portfolio the commencement, in some few scores of engravings, of what may turn out to be a very interesting collection. To collect the portraits of the eminent physicians of the past might give a completeness, as an appendix, to the admirable work of Dr. Munk on the Roll of the College. Some of the few engravings, simple as they are at present, call to mind many curious circumstances connected with the history of the College, known but little to its members. A ground plan, for instance, of the old building in Warwick-lane shows the plot of ground upon which a portion of the Prison of Newgate now stands, and which was sold by the College to the Corporation of London. Then there is a caricature of the garrulous and egotistic Sir Wm. Browne, who came under the lash of Foote in the "Devil on Two Sticks," and which bears the inscription—

"Ecce
Fuscus, equus, Medicus, Rhetor, Dux, atque Poeta."

Portraits of Heberden, Aitken, Arbuthnot, Mark Akenside, Brocklesby, Budd, F. Glisson, Garth, Cains, Pepys, Denman, Lettsom, Gilbert (Physician to Elizabeth), Mark Ridley, Vallansi, and many others remind one of the learning, the honourable antiquity, and the utility of the College in past times, and the eccentricities of many of its members, and indicate, as we said before, how interesting a thing the projected collection might become.

*Dr. Morton*, (Glasgow.)—Our correspondent will have noticed that our columns are open to both sides of the question of the antiseptic treatment as of every other medical question; but it does not seem to us that the letter which he encloses makes any contribution of fresh facts on the subject so as to call for its insertion.

### SICK CLUB FOR MEDICAL MEN.

*To the Editor of* THE LANCET.

SIR,—I have read a letter from "M.R.C.S." in your last issue respecting the above, and can add my testimony to the urgent need of such an institution. I could myself guarantee twenty members joining such a Society; and am sure surgeons, clergymen, curates, lawyers, and such a class of men would at once see the advantage of paying a yearly premium to receive, say, from £2 to £6 per week in time of sickness. Of course less than this would be of not much use to the class likely to join the Society. In my opinion it is a *universal* want that such a Club should be started, and no one can doubt its success. I shall only be too glad to join it, and have long felt what a boon it would be to me and my family, in case of sickness to myself; and, again, there are those who would be in a condition of perfect helplessness, as regards income, if stricken with illness. And what a comfort for such to have a Club to fall back upon!

I hope, Mr. Editor, you will do your best to push the matter forward; give us one of your leading articles on the subject; but do not let us make it a Club exclusively for the medical profession.

I remain, Sir, your obedient servant,

October 12th, 1869. CHIRURGICUS.

*To the Editor of* THE LANCET.

SIR,—In answer to your correspondent, "M.R.C.S.," whose query is whether there is a Sick Club for medical men, I can say that I had sent to me some time back a paper of Rules concerning a Club, termed the "Medical Provident Society, in connexion with the British Medical Association, established 1865, and enrolled under the Friendly Societies Acts. All applications for forms of certificate and for other information regarding the Society must be made to the Secretary, Dr. A. Henry, 15, George-street, Portman-square, London, W." Your obedient servant,

Hatfield, Herts, October, 1869. L. F. OSBALDESTON.

### THE LATE DR. RUBIDGE.

IN reference to the death of this gentleman, noticed in THE LANCET last week, we have received a subsequent number of the *Cape Argus*, in which we find it stated, as the result of a post-mortem examination, that death was due to sudden spasm of the heart, induced by the therapeutical action of certain nerve-stimulant medicines which he had lately been taking as a remedy for loss of energy, &c. The autopsy revealed also organic disease of the heart. It appears that a mistaken impression had got abroad as to the cause of Dr. Rubidge's death.

*H. B. P.* will find the information he requires in a pamphlet published a short while ago by Mr. Marshall, the President of the Medical Society of London.

### REMUNERATION TO HOUSE-SURGEONS.

*To the Editor of* THE LANCET.

SIR,—In answer to the question of "H. S.," in your last impression, with respect to the remuneration to house-surgeons for a professional opinion, I should say, give no opinion without a fee. The following will illustrate what I mean. Some time ago I had a subpœna served upon me as a witness in the County Court of Uxbridge, and being placed in the witness-box, and being asked my opinion by the prosecuting counsel on the subject matter before the Court, I stated in answer that I believed I was bound by my subpœna to make known any *fact* relating to the case; but that my opinion was a *professional one*, and consequently my private property, and that I would not part with it without a fee. An appeal was made by the counsel to the Judge, who stated that I was right, and I left the witness-box. But having been appealed to by the counsel to know what my fee was, I answered one guinea; this was at once granted, and my opinion given, which the counsel told me was worth a guinea. I left the witness-box, and got my fee.

I am, Sir, yours, &c.,

Uxbridge, October 11th, 1869. WILLIAM RAYNER.

*** Pressure on our space has compelled us to defer our promised consideration of this subject.

### A GUIDE-BOOK TO MERCHANT SEAMEN.

IF the readers of a little book that has been forwarded to us were to accept our guidance, we should counsel them not to follow in the track marked out for them by its author, "A Physician," if they wish to cause as few funerals as possible. The Guide-Book in question is said to be the eleventh edition, published in London, price 1s., for the use of merchant seamen, and supplied by chemists to masters of vessels. We are chiefly concerned with the practical observations in it on the treatment of disease and accidents. Here are a few of them:—

"The general treatment of fever consists in evacuating and relaxing the system during the period of excitement by bloodletting, emetics, purgatives, &c.

"The treatment found most efficacious for remittent fever consists in bleeding largely at the onset of the disease, probably to as much as two or three pounds, giving ten grains or a scruple of calomel, with a black draught."

No wonder yellow-jack is so fatal. The large number of affections for which bloodletting is recommended is startling: in the continued and eruptive fevers, dysentery, cholera, acute rheumatism, inflammations generally, and apoplexy; in fracture of the ribs, in intoxication, and drowning, it is to be had recourse to, according to our Guide. The caution given under the head "Bloodletting" scarcely mends matters, and the directions to masters of vessels as to how to perform venesection are so much superfluous and possibly dangerous knowledge. Masters of vessels are many of them intelligent men no doubt; but we do not think they could safely be trusted to bleed a sick man; several of them would even faint if they saw the operation performed by a surgeon. The sooner this Guide-Book is rewritten by a physician of less heroic mind the better for the lives of seamen.

*Mr. S. Argent.*—Our correspondent's pathology and therapeutics are very striking; but the incidental effects of his treatment seem to us very serious.

### IDIOSYNCRASIES.

*To the Editor of* THE LANCET.

SIR,—A suggestion thrown out by Dr. Ross that death from chloroform might arise from peculiar idiosyncrasies of the patient is worthy of attention. It might serve a good purpose if a record of such idiosyncrasies were preserved in every instance where they are unequivocally present.

I am acquainted with a remarkable case, where the slightest taste of a strawberry sets up what may be designated as serious poisoning. The patient on three occasions has been affected in the same way. Once, on eating some trifle, in less than three minutes, failure of the heart's action came on, and prolonged fainting followed. Again, some strawberry-jam was tasted merely on the tip of the finger; in a short time the patient was on the floor, perfectly flaccid, but powerless to move, fainting on the slightest attempt at motion. The last occasion was after drinking a glass of champagne. A repetition of the symptoms was so identical as to lead to the presumption that the wine had been flavoured with strawberries. In every instance the fainting lasted quite half an hour, and left the patient weak and languid. The only remedies that promoted restoration were ammonia and brandy, which were taken in large quantity, without any feeling of intoxication remaining.

There can be no doubt that in this case a single strawberry might cause death.

I am, Sir, yours truly,

Marlborough College, October 13th, 1869. WALTER FERGUS.

WE have received letters from *Mr. Godfray* and *Dr. Dickson*, of Jersey, complaining of our remarks on the treatment of Browning in the Queen's Farm Lunatic Asylum, and enclosing the report of the coroner, an abstract of which will be found in another page. With respect to the nature of the restraint employed, we would observe that in the report given in the *Jersey Independent*, Dr. Dickson is reported to have stated that the patient was cruelly tied in a position in which sleep was impossible, and to have asked why he was not placed in a padded room; and in the report of the post-mortem, signed by Messrs. E. Marett and C. Le V. Godfray, Surgeons, it is stated that "a few circular patches about the size of a shilling, of a purple hue, existed on the arms and anterior portions of the thorax, apparently caused by pressure of the fingers, and that a slight discoloration also existed round each wrist." This discoloration was, doubtless, produced by the stocking, and is sufficient to condemn the method of restraint. We think the evidence overwhelming that there was great confusion both amongst the patients and attendants in consequence of the absence of the superintendent. There was at the moment no really responsible person to give orders as to treatment, or to see those which were in fact proposed duly carried out.

*J. W.*—The proper course for our correspondent to pursue is to make an application to the Director-General, through the principal medical officer, forwarding his testimonials &c. at the same time. We believe, however, that there are no vacancies.

### CHRONIC MUCOUS DISCHARGES FROM THE COLON.

*To the Editor of* THE LANCET.

SIR,—Can any of your readers oblige me with information on the treatment of the following cases:—

I have two female patients suffering from discharges of stringy thick mucus from the ascending colon, occurring about every fortnight or three weeks. These discharges have considerable consistence, and appear not unlike tapeworms; they are quite distinct from the fæces. The evacuation is preceded by pain in the ascending colon, and is followed by debility. Both my patients are single, of nervous, hysterical temperament, are fond of medicine, and have taken a great deal of it, and one of them attributes the complaint to a quantity of calomel which she says she took some years since. In the intervals there is obstinate constipation and piles.

I am, Sir, yours obediently,

October 12th, 1869. COLON.

### WATER-SUPPLY OF HINCKLEY, LEICESTERSHIRE.

THE Hinckley Local Board have happily arrived at the conclusion that the inhabitants are very inadequately supplied with water, and that the public health and sanitary condition of the people demand that the Board take immediate steps to furnish the town with a better supply. There are between 1600 and 1700 houses in the town, very many of which have no wells. The public pumps are said to be a nuisance and a disgrace, and the water so generally impure that several pumps have been locked up as unfit for use. There are many cases of fever, and a relieving officer requested to know if the Board meant to have all the people poisoned with impure water. We would, however, venture to advise the authorities not to commit the water-supply to the exclusive care of a private company. The Local Board should, at least, become contributors to the scheme, and reserve the power of buying up the company's interest should it think fit to do so. We can scarcely too much impress upon the inhabitants the importance of not committing the essential of cleanliness and health to the monopoly of an independent body; and we could point to a host of towns, London included, which are suffering from the selfish policy which is so frequently pursued by persons who think of dividends alone—a policy altogether antagonistic to, if not subversive of, the public good.

*An Assistant.*—The whole salary would be forfeited, because the contract is violated.

### ARMY MEDICAL DEPARTMENT: PROMOTION.

*To the Editor of* THE LANCET.

SIR,—The present chronic stagnation in the promotion of assistant-surgeons is a subject on which I would crave the attention of yourself and my professional brethren, so that by open discussion of it—for which purpose I trust you will lend us your columns, as well as your ability and advocacy—we may try to induce the authorities to devise some measures for accelerating it. So long as we remain silent, so long will it be taken for granted that we are contented and happy with our lot, when far otherwise is the case.

During the present year, promotion has been exceedingly limited, and the same may be said of last year. By referring to the Army List, men will be found with over fourteen years' service still lingering on in the "slough of despond;" others with twelve years' service, on whom, at the present rate, promotion will not descend for years, and the prospect of it for men of seven to ten years' service is only chimerical. All this is very grievous to be borne.

It may be urged that the new and increasing scale of pay ought to compensate for lack of promotion. But I would point out that in addition to the difference of half a crown a day pay between the two grades—no small sum to poor men,—there is the loss of the position, with its many appendages, all as good as money; and even setting aside these weighty considerations, nobody, whatever his calling may be, expects to remain in its lowest grade all his days. It must be remembered also that with service, age creeps on, bringing with it many changes in mind as well as body; one's family grows larger, and one's hair turns grey, but the long-looked-for promotion cometh not!

If the shoe pinches at home and in the colonies, it is ten times worse in India, where the difference of pay between an assistant-surgeon of ten years' service (with no prospect of a rise) and that of a surgeon is over £1 per diem, and where we have men actually junior to us going over our heads, as was the case in the last Indian Gazette. I allude to the assistant-surgeons of the Indian medical department, who are promoted after twelve years' service, irrespective of vacancies; and our feelings can be better imagined than described in having to serve side by side with these officers, and, if the service requires it, be subservient to them.

I now leave the subject without going more into details, as these will be best obtained by open discussion. Yours faithfully,

October, 1869. BALD AND GREY.

*A Public Vaccinator in a Country District.*—If our correspondent performs the operation, he must, of course, give the certificate. We would suggest that the position of matters as stated by our correspondent should be brought by him under the notice of the Board.

### A QUERY.

*To the Editor of* THE LANCET.

SIR,—Can any of your correspondents inform me if the pupils of the somnolent lady at Hartlepool are contracted during her "sleep"? The pupils are contracted in normal sleep. Yours, &c.,

October, 1869. J. H. T.

*Dr. Highmore.*—We advise that the matter be placed in the hands of a solicitor. We are unable to give any information relative to the institution referred to.

A CORRESPONDENT's suggestion relative to the titles granted by the College of Physicians shall receive attention.

### CANNABIS INDICA IN HYDROPHOBIA.

*To the Editor of* THE LANCET.

SIR,—The occurrence of several cases of hydrophobia justifies me in forwarding to you an abstract of part of a paper which I have received from Prof. Polli, of Milan, for communication to the St. Andrews Medical Graduates' Association at its anniversary session in December, in which he relates a case of hydrophobia treated by large doses of haschisch. The remedy was given in seven and a half grain doses every four hours for five times. The man died; but the effect of the Indian hemp on the terrible delirium and frightful convulsions of the disease was most marked. It changed a suspicious, raging, biting, cursing maniac into a gentle, tranquil, thankful patient. All other remedies seem so powerless even for palliation in this disease, that it would be well, if, as is to be feared, other cases occur, to try the effect of the Indian hemp. I cannot say whether Dr. Polli's haschisch was stronger or weaker than the Indian hemp of the British Pharmacopœia; but it is clear that the dose should be very large, and it may be that it should be administered hypodermically.

I am, Sir, yours faithfully,

Gloucester-terrace, October, 1869. L. W. SEDGWICK, M.D.

### TIRED MUSCLES.

THERE are few of us who do not know what it is to have the muscles of one's arm or back tired in railway travelling, or after sitting a while reading, from the want of some appropriate support to the limbs or the trunk. In the train, reading is a fatiguing operation, from the strain which is needed to hold one's book up before the eye; and the mere sitting during a long journey has its uncomfortable consequences from the fact that the trunk has to be steadied, often with a good deal of effort—a fact which at once explains the instinctive double clasp of the umbrella or stick upon which travellers are wont to rest with a forward bend. If the want of appropriate support is felt by the healthy, how much more urgent must be the need in the case of the invalid. Appliances of different kinds have been devised to prevent muscle fatigue. But one of the simplest contrivances for general use is the Alpha Railway Arm and Book Rest, which has been devised and patented by an officer in the army, and is to be obtained at Mr. Hill's, Haymarket. We have tested its merits in the house with satisfactory results. In railway travelling, in the library, and to invalids in hospitals and other institutions, we should imagine it will prove a boon.

### ANTISEPTIC SURGERY.

*A Student* (Glasgow) writes:—"Judging from the amount of writing both against and in favour of antiseptic surgery according to Lister's method, one would expect that some advancement should have been made either in its establishment or in its being set aside. As a student of Glasgow College, I had every opportunity of judging of its merits, having seen it tried in all the surgical wards of the Glasgow Royal Infirmary. No one can have any idea of the possible success obtained by its employment without paying a visit to the professor's wards, and seeing it applied by his own hands."

*Mr. W. L. Gibson*, (Dundee.)—We have not received a copy of the paper to which our correspondent refers. Will he be kind enough to forward us another copy?

*J. H.*—None of which we are aware. Of course it would not be difficult to produce death in the way described.

THE letter of the "Silicated Carbon Filter Company" shall be inserted in our next impression.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir J. Y. Simpson; Prof. Gamgee, Birmingham; Dr. Gavin Milroy, Richmond; Prof. Donkin, Sunderland; Mr. T. Holmes; Mr. Smith, Brighton; Dr. Ogle; Dr. Gervis; Mr. Rayner, Uxbridge; Mrs. Kershaw, Oldham; Mr. Law; Dr. Sibbald; Dr. Gross, Philadelphia; Mr. Crew; Mr. Roberts; Dr. Izard, Weymouth; Mr. Weard, Sheffield; Dr. Prior, Bedford; Mr. Furley; Mr. J. H. Gornall, Preston; Mr. Wells; Mr. Blayney; Mr. Ransom; Dr. Burton, Buxton; Mr. Wigg, Southminster; Mr. Weare; Mr. Winstanley; Dr. J. Knox; Dr. Bogg; Mr. Fisher, Worksop; Dr. Pierce; Mr. Sendall, Norwich; Mr. Barrett; Dr. Dickson, Jersey; Mr. Poole; Dr. Palfrey; Mr. Gregory; Dr. Ramsay, York; Mr. Roberson, Durham; Dr. Hamilton, Pembroke; Mr. Forbes-Firth; Mr. Trownson, Ripley; Mr. Elton; Mr. J. Robbins; Dr. Dale, Plymouth; Mr. Moxon, Derby; Mr. Mills; Dr. Forbes, Edinburgh; Mr. Wheeler; Mr. Baynes, Wareham; Mr. Taylor, Stoke-on-Trent; Mr. Rendle; Mr. Wilson; Mr. Andrews, Sheffield; Mr. Kent, Bromley; Dr. Fetherston, Melbourne, Victoria; Mr. Lloyd; Mr. W. Payne, Ware; Mr. Morgan, Lyme Regis; Mr. Baynes, Portadown; Mr. May; Mr. Lane; Dr. Gordon, Ferndale; Mr. Biggs, Grimsby; Mr. Combe; Mr. Mogford; Mr. Wyllie; Mr. Manson; Mr. Phillips; Mr. Williams; Dr. Murray, Sheffield; Mr. A. Jones; Mr. Bate; Mr. Argent; Dr. Barnes, Wrington; Mr. E. N. Smith; Mr. Brown; Dr. Macadam; Mr. Lucas; Dr. Mirton, Glasgow; Mr. Paton; Mr. Dring; Dr. Arbuckle, Thorne; Mr. M. Long; Mr. W. Pearce; Mr. Williamson, Perth; Dr. Crowther; Dr. Broadbent; Dr. Alsberg, Graaff Reinet; Mr. Stone; Mr. Nutt; Mr. West; Mr. Wade; Mr. Mills; Dr. Falloon, Liverpool; Dr. Mylee, Limerick; Mr. Watkins; Dr. Goydor, Bradford; Mr. Wall; Mr. Kent, Bromley; Mr. Armstrong; Mr. Osbaldeston, Hatfield; Dr. Highmore, Sherborne; Dr. Foulas, Chesterfield; Dr. Eastes; Dr. Fothergill, Morland; Mr. Marten; An Assistant; F.R.C.S.; An Admirer of "Nobody;" M.D. St. Andrews; L.R.C.P. Edin.; The Silicated Carbon Filter Company; An Old Correspondent; T. B. B.; J. H.; Ignoramus; C. H.; Phys.; H. R. E.; Colon; J. E. D.; A Student; Chirurgicus; A Provincial Teacher; H. B., Iver; R. W., Stratford; M.B.; A., M.D.; M.R.C.S., L.S.A.; L.M.; W. W.; A Public Vaccinator; J. W. C.; L.S.A.; A Plain Dealer; &c. &c.

*Western Mail, Brighton Examiner, Parochial Critic, Southern Reporter, New York Medical Journal, Scarborough Gazette, Nelson Examiner, Brighton Observer, Hertfordshire Standard, Australian Medical Gazette, Times of India, Birmingham Daily Post, Brighton Gazette, Cape Argus, Journal of the Scottish Meteorological Society, Lincolnshire Chronicle, Nottingham Daily Guardian, Derby Reporter, Notes and Queries, Liverpool Albion, Brighton Daily News, Gardeners' Magazine, Herts Advertiser, Essex Standard*, and *King William Town Gazette* have been received.


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